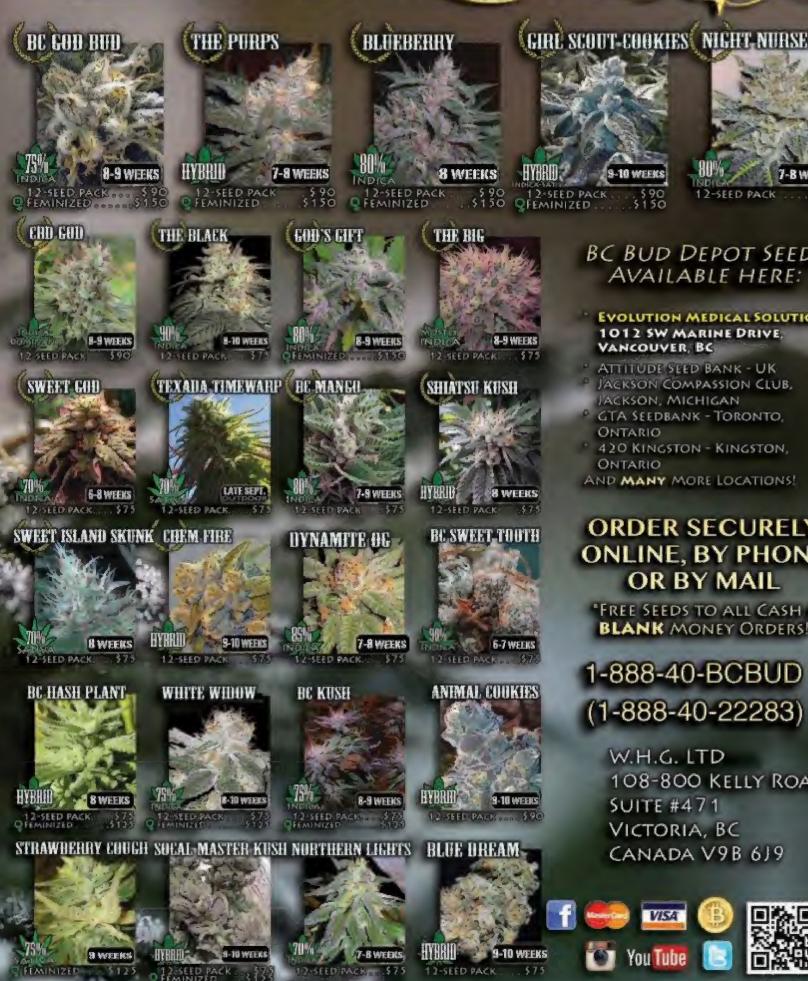
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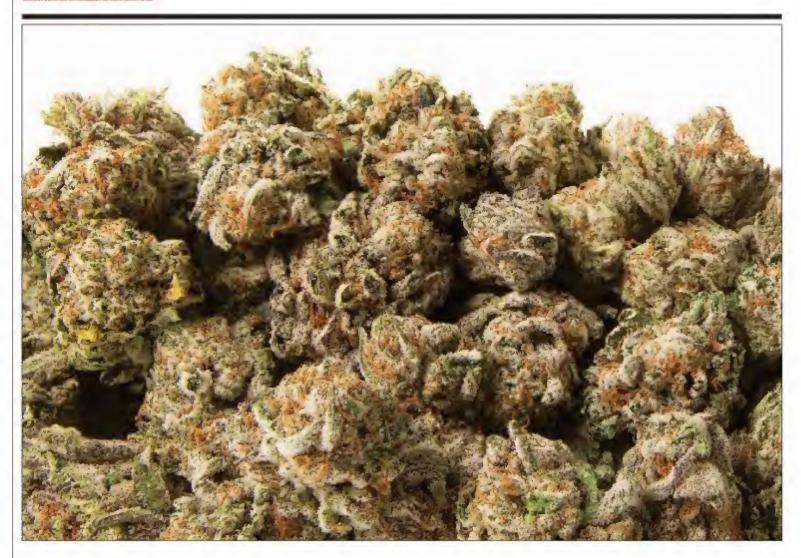
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The Godfather OG, an indica-dominant hybrid (Cherry Pie x Granddaddy Purps x OG Kush), broke the previous Cannabis Cup record of 32.13% THC.

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By Danny Danko

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High Times How-To

After slowly changing the Drug War mind-set created by 80 years of prohibition, after gathering signatures, lobbying local legislators and, ultimately, changing state laws to legalize cannabis, you'd think simply purchasing legal marijuana in a dispensary would be the easy part. But believe it or not, buying legal pot comes with its own pitfalls, and many people find themselves disappointed by what should be a wonderful experience.

Fortunately, *High Times* is here to help! Our guide to buying recreational weed from dispensaries is full of great

tips to help inexperienced buyers get the most out of their purchases. This guide highlights important indicators in aroma and appearance as well as useful tricks to help you choose the best pot or hash possible.

If you're lucky enough to live in or visit a state that allows the sale of recreational cannabis in dispensaries, check out our buyer's guide so that you don't get stuck with pricey, subpar pot! *Visit hightimes.com for more information*.

On Instagram

Gaze in awe at this mind-boggling shot of some serious trichome coverage. You can get lost in this stunner from @dynasty_genetics, which makes you contemplate your favorite plant as if for the very first time. The trichs in question come from a Cherry Vanilla Cookies plant we'd love to get our hands on. For more quality pot pics, give @dynasty_genetics a follow. And stay tuned to @hightimesmagazine for round-the-clock cannabis coverage.





Which SNL Cast Member—Past or Present— Would You Want to Get High With?

58 Mutay	34%
Eddle Murphy	6%
Chris Fauley	17%
Tima Fey	B%
Andy Sambers	5%
Kristian Wilg	4%
Other	28%

Smoking Poll

Saturday Night Live has been making stoners laugh for nearly as long as High Times has been teaching them to grow—the seminal late-night sketch show debuted in 1975, one year after HT first hit the newsstands. When SNL's youngest current cast member, Pete Davidson, stopped by the High Times offices (see our interview on page 101), it got us to thinking: Which SNL cast member would you most like to get high with? We decided to ask our readers—and to make the choice even tougher, we left it open to cast members of any era, living or dead. An "Other" option was provided so that readers could write in their pick in the comments.

The great Bill Murray was the easy winner, garnering 34 percent of the vote—because, come on, who doesn't want to get high with Bill Murray? "Other" came in second with 28 percent, and the most common write-in was the late John Belushi. Seventeen percent of our readers would most like to toke with Chris Farley (if only!), while Eddie Murphy, Tina Fey, Andy Samberg and Kristen Wiig all finished with 6 percent or less of the vote. *Take our latest poll online at hightimes.com!*



We Want To Hear From You!

Tweet your best high observations and comments our way @HIGH_TIMES_Mag for a chance to be featured on this page! And be sure to follow us on Facebook (Facebook/HIGHTIMES-Mag) and Instagram (@hightimesmagazine) for all the latest news as it's happening!

@GameNGrindTV: @HIGH_ TIMES_Mag Its time for the adults of TN to stand up for themselves and their right to use Cannabis

@K_The_Trey: @HIGH_TIMES_Mag If only there were some magic plant they could grow and tax

@jeromehamm: Share the herb it's the healing of the nation @ HIGH TIMES Mag

@Chris_Myers50: @WeedFeed @HIGH_TIMES_Mag why do we cage anyone for choosing a safer recreational drug than alcohol and safer medicine than aspirin #ODeaths

@ReeferMcGee: @HIGH_TIMES_ Mag I take a 3 day break every now & then when I feel my tolerance is high.

@rockonjenn: @HIGH_TIMES_ Mag I am going to need the weed to get thru the next 4 years... illinois need to hurry and legalize it recreationally

@AdrianAghaie: @HIGH_TIMES_ Mag Why use Adderall when I can list at least 15 strains that take its place...oh wait...work place drug testing.

@Twisted_Shadow: @HIGH_ TIMES_Mag How long before sessions begins the raids in MJ legal states?

@JustDeeezy: @HIGH_TIMES_ Mag @JoinGreenRush release all non violent criminals that are locked up on drug charges then. Specifically weed!

@grayfoxv: @HIGH_TIMES_Mag Been smoke'n about 40years. i am pretty good at it. strains have come a LONG way since then

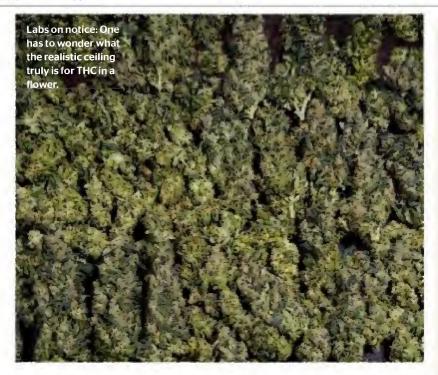


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12 Editor's Letter
High Times May 2017



Questions Asked, Questions Answered.

FINALLY, it is that time of year again.

The lab results have been tallied and the charts compiled. Records have been broken and The List is set for the Strongest Strains on Earth. No other entity on the planet receives and tests a more diverse cross section of cannabis strains from around the globe than the High Times Cannabis Cup. With seven competitions in 2016, we saw some of the best marijuana being bred and grown, and this year looks to be even better with a full slate of *ten* Cup competitions sweeping across the country—and possibly beyond our own borders once again (stay tuned)!

Still, with all the hype one has to wonder just how far cannabis can go in terms of potency? Clearly, there must be a limit as a bud can't be 50 percent THC, or can it? Check out The List for more details on the top THC and CBD strains from '16 and some notes on how lab testing plays a central role in figuring out the limitations of our favorite plant's potency.

Also up in this issue, a topic near and dear to many—especially in NorCal where a slew of competitors were just disqualified from a local pot competition—the use of pesticides in cannabis cultivation. What are the effects of these chemicals when smoked? What are the alternatives? Can labs identify these nasty compounds in cannabis?

And lastly, an important piece on legal hemp and its impacts, plus an interview with Pete Davidson, the youngest current cast member of *Saturday Night Live*, with his take on cannabis, comedy and the future, round out this most interesting issue of *High Times*. And, as always, a hearty thanks to our loyal readers, without whom we would have never made it this far.

Thanks for reading, everyone & stay well,



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Washington

What Would Jesus Toke?

In response to your article about Christians and cannabis ("Onward, Christian Stoners," Feb. '17), why not? Just check out Genesis 1:29: "And God said, behold, I have given you every herb-bearing seed, which is upon the face of all the earth, and every tree, which is the fruit of a tree-yielding seed." No more doubts: The Bible says it's okay. Enjoy!

A.R. Harlingen, TX

It's good to hear that my Christian brothers and sisters are embracing the herb as a way to get close to the Lord. I'm a former Baptist who left the church because I got tired of the preacher ranting and raving about marijuana and gays. As far as I can tell, Jesus Christ said, "Love God with all your heart and your neighbor as yourself." He did *not* say, "Love your neighbor as yourself, except for Bob and Bruce over there, and Linda and Kris up the hill." Be nice to me and I'll be nice to you. Simple as that.

Waverly from Westmoreland

CBD Rip-Off

I really need to vent somewhere. As a cancer patient, I've been dealing with Stage 3c ovarian cancer since the end of 2012. My treatment was successful at first, but after a year or so it came back! I started researching various self-treatments and decided that canna oil seemed a good way to go. I searched around for suppliers and came across a website marketing CBD oil. It all appeared to be legitimate, so my husband paid a lot of money that we couldn't afford to lose, only to receive nothing. Once they had our money, there was no more communication at all! I have tried e-mailing many times, texting the number on the website and even calling the US-all to no avail!

As advocates of cannabis for serious health issues, I thought you should know what's going on out there. I live in the UK, and now I have no money and no oil either. I wonder if it's possible to find out more about this person and his despicable actions, as I am sure I'm not the only one to fall for such an evil scammer! Is there anything you can do to help me, please?

B. Richards United Kingdom



"Why are we, as a society, denying the ones we love a safe alternative to the deadly pharmaceuticals that have ravaged our once-great nation?"

Unfortunately, there are many CBD scammers out there. People are desperate for a medicine that works; however, it's illegal to export CBD oil internationally. These individuals doubtless knew that and realized they could scam you. As always, this wouldn't occur if cannabis was legal, since you could obtain your medicine from a trusted friend, caregiver or local dispensary.

Forest Find

In 1975, when I was 16 years old, we used to sneak down into the bamboo jungles of Mississippi during our high-school lunch break and smoke out of a 6-foot bong made completely out of bamboo, including the bowl. It was sacred.

Fast-forward to today: I work as a park ranger and found two huge piles of trim dumped at a park. Whether it was from a legal grow or not, I found it disturbing that someone had just dumped it there. Then I dug into the pile and found that, below the top half-inch, the weed was still dry. In the end, I took home 2 pounds of trim full of sugar leaf and small buds.

I vowed to reuse this sacred plant. So far, I've dry-sifted an ounce of trichomes, which have been pressed. It smokes like heaven's hash, and I've made two pounds Send your letters to Feedback c/o High Times, 250 West 57th St., Suite 920, New York, NY 10107 Email: hteditor@ hightimes.com

of budder. I will never buy from a legal store. Grow your own. Enjoy nurturing your girls! Don't support government-run pot shops. Join me in respecting Mother Earth.

Kevin H.

If only life were that simple. Not everyone has the space, aptitude, desire or time to grow their own (or a park-ranger job that allows them to score a few pounds of free trim). Instead, they depend on healthy cannabis products purchased from well-run dispensaries.

Seeking Comfort

Here in this state, there's been a dramatic increase in the number of overdoses and prescription-drug-related deaths. Synthetic opiates like OxyContin, Fentanyl and others, as well as amphetamines like Adderall and Ritalin and benzodiazepines like Xanax and Valium, cause withdrawal symptoms when absent. These drugs are no longer respected as the temporary crutch they need to be.

Getting off these drugs is nearly impossible for some, and often not an option for others. Their use has become an epidemic, and it's taking the people we love from us! This epidemic offers no one immunity, since no social or economic class is free of these diseases. It seems to me that the pharmaceutical industry just wants them to flourish in order to continue to finance their corporations.

With all the suffering this nation is going through, the one thing everyone strives for is comfort—comfort in the knowledge that our loved ones love us, and comfort in knowing that we have their best interests in mind, as they have ours. Without that comfort, people numb their senses and their pain. That's addiction.

Why are we, as a society, denying the ones we love a safe alternative to the deadly pharmaceuticals that have ravaged our once-great nation? Why have we cast out the same kind of independent thinking that conceived this republic in the first place? Please join the fight for legalization!

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News Pro-Pot Protest

Thousands turned out in the nation's capital to show support for cannabis. p.26



Entertainment

Atmosphere

Slug from the hip-hop duo Atmosphere discusses selfeffacing rap and the perks of legalization. p.32



When You Pry It From My Cold, Dank Hands

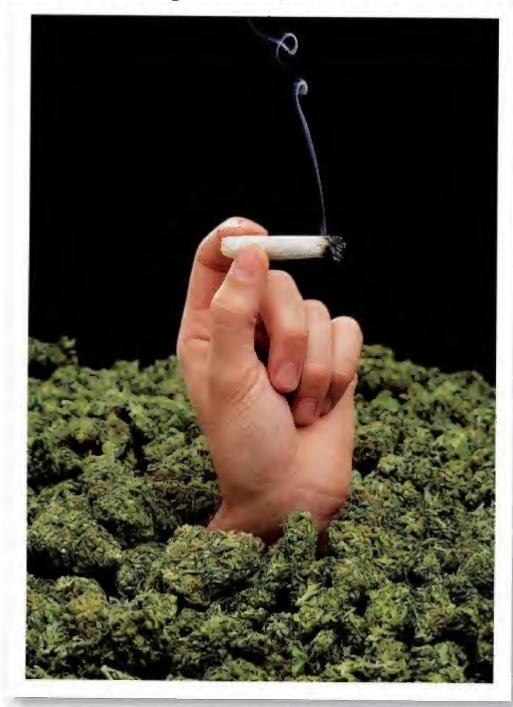
As more states legalize pot, the number of people losing their Second Amendment rights continues to rise. By Mike DiPaola

With dramatic progress on marijuana legalization well underway throughout much of the US, responsible weed consumers no longer need to feel like criminals. Unfortunately, Americans who use ganja—whether they're patients in need of medicine or among the tens of millions who indulge for recreational purposes—are still treated like lawbreakers by federal agencies. Most conspicuously, anyone who admits to marijuana consumption will be denied their Second Amendment rights.

For good or ill, the right to bear arms is one of the more inviolable of Americans' constitutionally guaranteed rights. But when law-abiding citizens admit to marijuana use—regardless of how often or for what purpose—they will lose the right to purchase and possess firearms.

This issue came to light in 2011, when S. Rowan Wilson, a medical-card holder in Nevada, was turned down in her attempt to purchase a gun. She decided to sue the *federales*—specifically, then—Attorney General Eric Holder and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF).

Wilson's court filing lays out the details: "I sought to purchase a firearm for personal protection, but discovered, in my attempt to make the purchase, that my mere possession of a medical marijuana registry card prohibits any federal firearms licensee from selling me any firearm or ammunition... The defendants have prohibited a certain class of lawabiding, responsible citizens from exercising their right to keep and bear arms; the defendants have enacted policies,



procedures and customs with the specific intent of denying the Second Amendment rights of persons who have registered to use medical marijuana pursuant to and in accordance with state law."

Shortly thereafter, the ATF sent a

missive to all federal firearms licensees and laid down the law: "[A]ny person who uses or is addicted to marijuana, regardless of whether his or her State has passed legislation authorizing marijuana use for medicinal purposes, is an 24 Highwitness News High Times May 2017

unlawful user of or addicted to a controlled substance, and is prohibited by Federal law from possessing firearms or ammunition."

That letter got the attention of officials in some of the more gun-loving states in the union. Montana, for one, was not amused, and its attorney general, Steve Bullock, fired back with the following response to Holder: "The ATF letter implicates serious legal issues under the Second Amendment, and equal protection and due process clauses of the Fifth Amendment. In addition, the letter raises serious policy and practical concerns."

This admonition didn't help Wilson's cause, however: Last summer, the Ninth Circuit Court of Appeals upheld the ban, clinging to the Feds' retrograde logic. "As a Schedule I controlled substance," the court ruled, "marijuana, under federal law, is deemed to have 'no currently accepted medical use in treatment [and] a lack of accepted safety for use... under medical supervision."

Lest there be any doubt about the application of the law, the ATF revised its Form 4473, which is required for gun purchases from registered dealers, this past November. The bold-print revision targets the residents of states that have

eased up on weed prohibition: "Warning: The use or possession of marijuana remains unlawful under federal law regardless of whether it has been legalized or decriminalized for medicinal or recreational purposes in the state where you reside."

For Don Turner, president of the political-action committees Nevadans for State Gun Rights and the Nevada Firearms Coalition, the ATF revision was a call to arms: Since Nevada's voters just decided to legalize the green, a lot of people will unwittingly become criminals in the eyes of the (federal) law. "A lot of our people who don't use marijuana now may find themselves in a lot of trouble if they possess a firearm or attempt to buy one," Turner warns. "Guys, you are giving away your state's rights to the federal government. Gun rights are civil rights."

The myopia that denies Americans their constitutional rights will disproportionately affect veterans, who are increasingly turning to medical cannabis for the relief of pain, post-traumatic stress disorder and many other service-related issues. US Army veteran Roger Martin, founder and executive director of Grow for Vets, a nonprofit that helps ex-service members access medical cannabis, says

this injustice is probably *not* what the founding fathers had in mind.

"When the Second Amendment was written and passed, I'm sure they didn't think about cannabis," Martin says. "But there's no mention of that or any other drug, so it's just an arbitrary deal." And nonsensical to boot: "The whole thing is just crazy. If there's anyone who knows how to use a firearm, it's a veteran," he adds. "And they have a right to protect their families."

But if you think the nation's most powerful gun-rights organization has come to the defense of the Second Amendment in this particular case, think again. The National Rifle Association, which we see all over the news defending gun owners after every mass shooting, can't be bothered to stand up for the rights of law-abiding citizens who happen to use cannabis. (The NRA didn't respond to *High Times*' repeated requests for comment.)

"The NRA, I think, certainly *could* be an advocate," Martin opines. "I'm sure they stayed away from it because of the controversial nature of cannabis itself."

Inevitably, the day will come when cannabis is fully legal across the land. Hopefully, by then, the courts and agencies like the ATF will have caught up.

HIGH FIVE

OTC Killers

Cannabis has never killed anyone—but other commonly used drugs have. By Mark Miller



Acetaminophen

The Food and Drug Administration has linked at least 980 deaths in 2013 to acetaminophen, a pain-relieving drug found in products like Tylenol. It also causes liver damage. From 2006 to 2013. acetaminophen killed more people than all other overthe-counter drugs combined. Since 2006, those dying accidentally from taking too much acetaminophen surpassed the number of those committing suicide via intentional overdose.



Ibuprofen

Ibuprofen and other nonsteroidal anti-inflammatory drugs (NSAIDs) pose such a risk of heart attack and stroke that even those without coronary issues are at peril. The FDA had to strengthen its warnings for NSAIDs in July 2015, since even the very short-term use of ibuprofen products like Advil and Motrin can be fatal. By the way, combining ibuprofen and acetaminophen can lead to gastrointestinal bleeding.



Lidocaine

Lidocaine, a local numbing agent commonly used for neuropathic pain, can cause irregular heartbeat, difficulty breathing, seizure, coma and (eventually) death. While serious adverse reactions to lidocaine are relatively rare, systemic exposure and excessive use can mess with the central-nervous and/ or cardiovascular systems. Lidocaine is certainly more dangerous than any cannabis-based topical out there.



Naproxen

Another NSAID that can cause heart damage, naproxen is found in brands like Aleve. Naproxen works more slowly than ibuprofen but offers longer-term pain relief. NSAIDs are dangerous for the heart due to the manner in which they interact with platelets (the cells that enable blood clots to prevent bleeding). Naproxen can also be dangerous if mixed with alcohol.



Salicyclate (Aspirin)

Surprised to see this household "wonder drug" on the list? Don't be. And if you've ever heard the expression "An aspirin a day keeps the heart attack away," don't believe it: Take too many and aspirin can put you six feet under. As with acetaminophen, death by aspirin is not pretty: Aspirin poisoning, which is especially dangerous for kids, can lead to seizure or cerebral edema.



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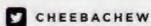


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Inside the Wide World of Weed



DC Pot Protest

Donald Trump's inauguration in Washington, DC, on January 20 was marked by massive protests worldwide, but the headiest form of civil disobedience took place in DC's own DuPont Circle, where some 8,000 joints were handed out to protesters and attendees, despite public pot use being illegal in the nation's capital.

The line for free joints started forming at 6 a.m. and reportedly stretched nearly a half-mile down Massachusetts Avenue at its height, as organizers with the activist group DCMJ checked IDs to make sure that all recipients were 21 or over. The joints were distributed from a truck trailer outfitted with a faux prison cell that symbolized the stakes involved in pot prohibition.

The doobie demonstration was intended to send a message to the incoming administration, which many see as a potential threat to recent marijuana-law reform gains. Trump has nominated several devoutly antiweed politicians for key positions, including Representative Tom Price to head the Department of Health and Human Services and Senator Jeff Sessions to serve as US attorney general. Price's HHS could punish doctors for recommending medical cannabis, while Sessions has a long history of opposing pot and has recently stated his opinion that "Good people don't smoke marijuana."

To date, President Trump hasn't indicated how he plans to deal with cannabis, which is now legal for recreational purposes in eight states but remains illegal on the federal level. Hopefully, this protest will serve as a reminder of pot's popularity: As we go to press, only 36 percent of Americans approve of the job Trump is doing, while 60 percent of Americans favor legalizing cannabis.

BUD BANKING



Massachusetts Senator Elizabeth Warren is spearheading an effort to help marijuana-related businesses emerge from the financialservices Stone Age of cash-only transactions. Cannabusinesses are still largely prohibited from using banks, which hampers their competitiveness and long-term success, while limiting any business to cashonly transactions invites crime.

Warren, a member of the Senate
Banking Committee,
and nine other senators sent a letter to
the Financial Crimes
Enforcement Network asking for guidance on allowing
banks to work with
cannabusinesses.

Banking for the cannabis industry has improved slightly in recent years under an increasingly relaxed Obama administration. The number of banks and credit unions accepting marijuana money rose from 51 in 2014 to 301 in 2016. However, as Warren noted, less than 3 percent of America's nearly 12,000 regulated financial institutions currently serve legal marijuana businesses. It's time to legitimize this new multibilliondollar industry.



Walton Goes All In for Weed

When ESPN sought to bulk up its College Football National Championship coverage earlier this year by including NBA legend Bill Walton, the Worldwide Leader got more than it bargained for. Walton, a renowned Deadhead and unabashed fan of cannabis, appeared resplendent in Uncle Sam red, white and blue, complete with sequins and an American-flag-patterned top hat. However, the outfit was merely window dressing for Uncle Bill's appearance, which became an instant classic.

The live coverage offered an opportunity for Walton to stump for marijuana-law reform, among other things. Coming back from a commercial break, the broadcast captured Walton explaining to his co-panelists that "marijuana should not be a Schedule I drug." He later called for "blanket amnesty" for "all the people who've been in trouble" for pot.

During the show, Walton also declared that "I like to get high" while tossing a football off-camera. And when ESPN host Michelle Beadle stated, "I'm healthy—I plan on living forever," Walton suggested that she "stop by my room later... I've got something for that."



DEA Still Destroying Pot in WA

The DEA has placed Washington State in the crosshairs of its marijuana-eradication program, despite cannabis being legal there since 2012. In fiscal year 2016, Washington ranked fourth in

the nation in eradication funding, as the Feds spent a ridiculous \$760,000 destroying pot plants in the state.

The Seattle Times obtained financial documents from the DEA revealing the disturbing numbers. Incredibly, the agency spent \$26.49 on each plant destroyed in the Evergreen State last year—more than six times the national average. Proponents claim the program is necessary to combat illegal outdoor grows operated by Mexican drug cartels.

While Washington's eradication funding has decreased by 28 percent since 2013, it remains among the highest in the nation, particularly when compared to other states that have legalized cannabis. Colorado's eradication funding has dropped to zero over the last two years, while Oregon, Washington's neighbor, has seen its eradication budget cut 80 percent—from \$1 million down to \$200,000—over the last three years.



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Air Force Relaxes Reefer Rules

Getting realistic about recruiting, the US Air Force is relaxing its rules for previous marijuana use by potential cadets.

According to a statement by Gen. David Goldfein, the USAF chief of staff, "the Air Force is evolving so we are able to access more worldwide deployable Airmen to conduct the business of our nation." In other words, it's getting very difficult to find recruits who haven't smoked pot, and the Air Force can no longer afford to completely ignore applicants for having previously used a substance that most Americans think should be legal.

However, once enrolled, all cadets and airmen still face a zero-tolerance policy that results in immediate discharge if marijuana use is detected.

The policy change ends the arbitrary practice of asking applicants how many times they've smoked pot, which, it turns out, didn't have a standard acceptable answer in the first place: Some recruiters asked applicants if they'd smoked pot less than 15 times in their lives, while others asked if they'd smoked less than five times.

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Home Invasion Leads to Pot Bust

A Florida man who was the victim of a home invasion ended up going to jail after cops arrived on the scene and sniffed out his illegal grow op.

Michael Mora, 37, shot and killed 25-year-old Lhosdanny Brena Colarte, one of four suspects who broke into Mora's residence in January 2017. However, Mora wasn't arrested or charged for the shooting, but rather for operating a marijuana grow house stacked with over 200 pounds of pot and 123 living plants, which officers discovered while investigating. Police later confirmed that Mora was targeted for the robbery because of his illegal grow.

Mora previously served time for robbery with a deadly weapon and could face additional charges for possessing the firearm he used to defend himself against the intruders. POLICE POT POST
PISSES PEOPLE OFF

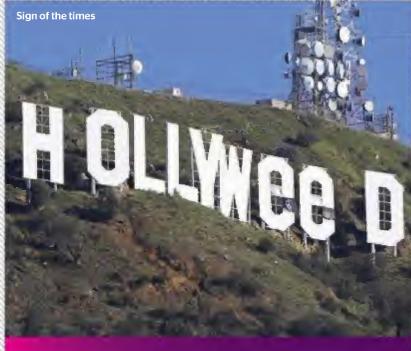


Police in a small New Jersey town are catching some heat after sharing a photo of a big bag of confiscated weed on Facebook. The Absecon Police Department posted a pic of the pot with the message, "If you were supposed to buy some Candy Kush this weekend, we have it here at the #Absecon PD. Just stop on down and ask."

While some readers seemed content to give the cops credit for the playful post, many viewed the message as inappropriate as it made light of life altering marijuana-related arrests.

The Facebook group Cop Block, a police watchdog collective, chastised the Absecon PD, writing, "South Jersey Cops think they are being hilarious, in much the same way every bully ever thought they were when they taunt and instigate their victims."

While the PD defended the post as "lighthearted," Facebook had the final say when it removed the post citing a Community Standards violation.



Hooray for Hollyweed

California voters legalized recreational cannabis last November, and on New Year's Day 2017, a brave artist transformed one of the Golden State's signature landmarks into a celebration of legal weed. For a brief but beautiful morning, the globally recognized "Hollywood" sign overlooking Los Angeles became "Hollyweed."

The tarps used to change the lettering from "wood" to "weed" on the 45-foot-tall, 350-foot-long sign were removed by 10:45 a.m. that same day, but the message was clearly sent by Zachary Fernandez.

This wasn't the first time that Tinsel Town's giant calling card, located on Mount Lee in the Hollywood Hills, was altered. On January 1,1976, Hollywood resident Daniel N. Finegood also modified the sign to read "Hollyweed" in honor of the first year of statewide cannabis decriminalization.

Fernandez, 30, turned himself in to police on January 9 and was charged with misdemeanor trespassing for the illegal art installation.

Sandwich Bags for Sale

Massachusetts voters legalized recreational weed last November, but statewide sales won't launch until July 2018, thanks to a controversial bill signed by Governor Charlie Baker. In the meantime, Bay Staters can give away up to an ounce of cannabis, but they're barred from selling pot.

However, one clever pot entrepreneur thought he spotted a loophole in the wording of that rule: A person going by the name of Corey Hampton



posted a Craigslist ad selling "empty sandwich bags" containing a "legal gift" of marijuana.

According to the ad, Hampton offered five different "empty" bags, ranging from "Bag A," which cost \$20 and contained a gift of 1 gram, to "Bag E," which cost \$325 and contained a gift of just under 1 ounce.

District Attorney David Sullivan spoiled the fun and confirmed that selling sandwich bags that happen to contain free cannabis is illegal, as the state's recreational pot law forbids the public advertising of marijuana "gifts," and selling an empty sandwich bag for \$325 constitutes fraud.



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Vape Vixens

Alternative pin-up sexpots the Suicide Girls have released a trio of vape cartridges dubbed Chill, Hustle and Zero. As you might guess from the names, Chill is an *indica* to help you unwind, Hustle is a *sativa* for the onthe-go girl, and Zero is a hybrid that supposedly allows you to toke without getting the munchies so you can stay model-lean. Hmmm...

The Suicide Girls cartridges contain pure cannabis oil with no added glycol, extracted from organic flowers sourced from the Lowell Farm in Santa Barbara, CA. All batches are double-lab-tested at Steep Hill and SC Labs—all of which makes for some clean, sexy vaping! Available in California. *chill.suicidegirls.com*, *hustle.suicidegirls.com*, *zero.suicidegirls.com*



Freeze It

Harnessing the healing power of hemp-derived CBD, this cold-therapy pain-relief treatment is perfect for arthritis, back pain, sore muscles and joints, and more. A cooling sensation quickly spreads when you roll on a thin layer of mentholated CBD Living Freeze. It's especially effective for post-run muscle and joint recovery—when applied to tired legs, it quickly soothes aches and twinges. *cbdlivingwater.com*

Pucker Up

A pioneer of pot-infused topicals, the Colorado company Apothecanna gets it just right with Lip Buzz, a soothing balm that's ideal for cold climates. This protective, nourishing topical



restores natural moisture and treats chapped-lip discomfort with mango butter, shea butter, cannabis, peppermint, grapefruit and ylang-ylang oils. Apply a generous amount daily for silky-smooth lips. **apothecanna.com**



sPOTLIGHT

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Atmosphere Makes Earnest Neuroticism Hip(-Hop)

Before Drake and Macklemore found success rapping about their most intimate fears and faults, Atmosphere's (self-) conscious rap helped cast this more authentic mold. *By Chris Parker*

"I never put a lot of effort into making people think I was supercool," says Sean Daley, a.k.a. Slug of the hiphop duo Atmosphere. "Some of my favorite rappers are so fucking cool that if I met them, I would probably be heartbroken how normal they were."

Such self-effacing selfawareness has long been the core of the 44-year-old Minneapolis rapper's appeal. Coming of age at a time when bravado was rap's legal tender, Slug came across as angry, broken and vulnerable.

"My music was coming from a place of worry because that was the culture in the '90s, but also the millennial thing when you talk about that loneliness and 'I'm not as cool as the rest of you,'" says Daley, who embodied his 99-plus problems in Lucy Ford, the titular devil/antagonist of three buzzworthy EPs released in 2000 and 2001.

"There's a lot of rap now that is people high on drugs looking inward and talking about their paranoia and worries," Daley continues. "I was in the early roots of that. But I was also on the tail end of that pre-millennium tension. So you take the mad stuff, crush it in with the low-self-esteem stuff I was into, and it was the perfect storm for me."

That storm broke in 2002 with Atmosphere's break-through second album, *God Loves Ugly*. Fifteen years later, some things don't change. On the titular track of that album, a frustrated Slug wondered: "How long I

gotta wait for these fools to sit down?"

On "Perfect" off his latest, Fishing Blues, he worries: "I don't want to plateau / Who I have to blow to play the half-time show?" While that song is in some sense a plea for larger error bars on good/bad/still-learning, it's born of the same self-questioning spirit.

"It is similar to 'God Loves Ugly' in asking who do I have to be to get this validation, whether I'm getting it from a woman or a partner "Now all these growers show up and say 'We appreciate you' and give you this entire jar of pot."

or from an audience or a bank. It's still very present in my music," Daley adds, "only now I can't pretend to be 170 pounds with a cig hanging from my mouth. That's over, dude. I have crystals in my pocket. The world is different for me. It evolves, thank God, and the plan is for the music to evolve too."

Another "Perfect" line suggests Daley's dad resembled the bearded fellow on Zig-Zag rolling papers. (True!) But it was the cigar box that held his father's half-smoked roaches that made the deepest impression.

"Every time I craved the smell, if there wasn't an adult around, I would go and smell the box," Daley says. "Later on in life, as a teenager, I remember smelling [weed] in one of my homies' rooms, and I was like, 'Fuck, yeah—let me smoke that with you!"

Being on tour so much, he's gotten a firsthand view of legalization's impact, and he likes it. "Now all these growers show up and say 'We appreciate you' and give you this entire jar of pot," Daley says. "Back in the day, if a fan gave you a nug the size of a nickel, you were like, 'Yo, my dude!' Now I look at this nug and I'm like, 'Yo, G, I'm about to give this to the light guy. Why are you giving me this shit?""



Slug In Cahoots

Slug collaborates frequently, most notably with Murs in Felt. Their three albums are dedicated to Christina Ricci, Lisa Bonet and Rosie Perez, and also feature songs like "Marvin Gaye," "Rick James" and "Kevin Spacey."

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The Cycle of Life and Deathcore

Suicide Silence guitarist Mark Heylmun finds solace in cultivating weed. *By J. Bennett*

The first time Suicide Silence guitarist Mark Heylmun tried to smoke weed, he was in fourth grade. He found a pouch of tobacco that he mistook for marijuana and sparked it up—with disappointing results. "I was way too young to be smoking weed anyway," he says with a laugh. "But I was trying to get into it before I could actually get my hands on it."

Heylmun succeeded two years later when he discovered his parents' stash. "My mom will fucking kill me for this, but I stole some weed from her and my dad," he confesses. "It was in this cigar box that I found. My dad was at band practice—he's also a guitar player—and my mom was at work. So I rolled myself my first joint. I smoked it, ate some Go-Gurt and put on some Black Sabbath."

At 28, Heylmun is now a daily smoker. "But not in the way you might assume," he clarifies. "I have a lot of respect for the plant now. When I was younger, I'd just get crazy and smoke as much as I possibly could. Now I usually do it at the end of the day. But occasionally I'll rip a bong in the morning and play guitar or go for a bike ride."

When High Times catches up with Heylmun, he's at Los Angeles International Airport, about to fly to Europe for a three-week tour with Suicide Silence. The Southern California deathcore band's new self-titled album—their fifth overall—is about to drop. But Heylmun says weed has been part of Suicide Silence's creative process since their 2007 debut, The Cleansing. "When I first joined the band, I was the only one who smoked," he explains. "They were all

kinda straight-edge, except for [drummer] Alex [Lopez], who joined later and was already down. So I brought the 'Let's smoke some bud and see what happens' vibe to the band. When we wrote our first record, me and Alex would sit in his car, drink coffee, smoke weed and just get into the mode of making music. It's evolved over time, but it's always been there."

Tragedy marked Heylmun's personal evolution from mere cannabis consumer to full-on cultivator. In late 2012, Suicide Silence vocalist Mitch Lucker was killed in a motorcycle accident. "When

"I do outdoor, greenhouse, indoor, hydro, soil mixes...
I'm learning as much as I can about different techniques. It's a never-ending learning process, just like music."

he passed away, I didn't know what I was going to do with my life," Heylmun recalls.
"So I turned to cannabis and invested a lot of money in growing. I converted a room of my house into a growroom. Working with the plants and the cycle of life was therapeutic in the mourning process."

Heylmun gave most of his first harvest to friends. "Everyone was like, 'You're really good at this," he says. "And I had so much fun doing it, the only thing I can compare it to was when I first started playing guitar. It was a whole other passion that I didn't know was there."

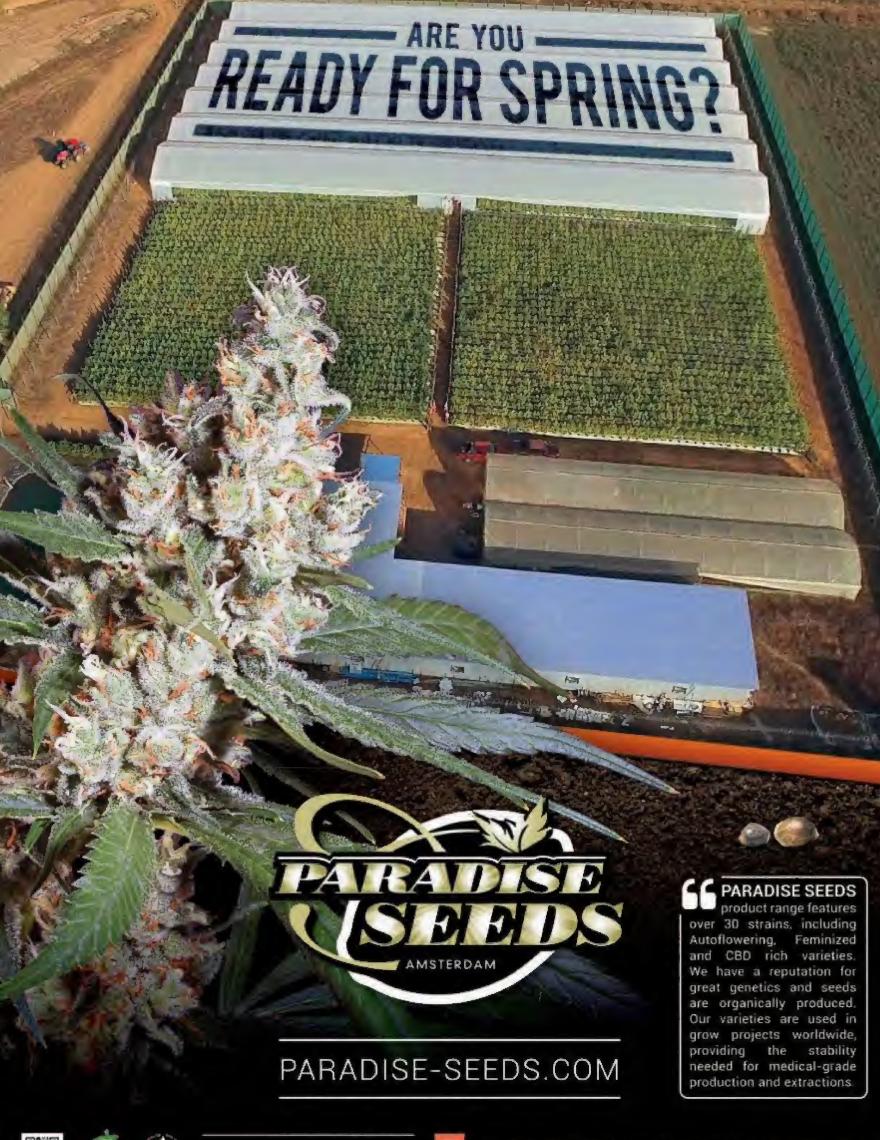
Since then, Heylmun has branched out extensively. "I do outdoor, greenhouse, indoor, hydro, soil mixes... I'm learning as much as I can about different techniques. It's a never-ending learning process, just like music."

Heylmun's most ambitious cannabis venture is already in the works. He recently partnered with California's Finest to collaborate on a Suicide Silence-branded product. "I wanna develop my own strain and have the first artist pack that's also like a breeder pack," he explains. "I just wanna do something new, man. It's time to blow it up." **



Rolled Gold

Heylmun says he's had success with strains like Sage N' Sour, Three Kings and Sour Cookies Kush. But his biggest coup was his first-place win for Best New Edible at the 2015 Caviar XO Gold Cup: "We made a gluten-free cinnamon roll called Cinnful Bites."





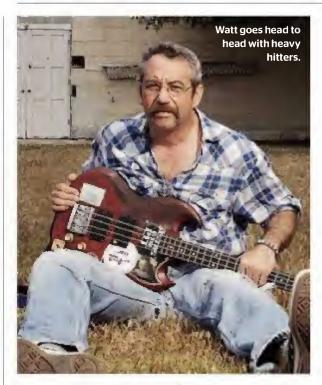






PREMIUM STRAIN COLLECTION

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Tag-Teaming the Man in the VanMike Watt's punk-rock battle royale.

In 1995, punk rock's big cheese, Mike Watt, released his first solo record, ball-hog or tugboat? To promote it, the ex-Minutemen/Firehose bass thumper organized an econo-type tour in which several like-minded chums—many of whom were in bands that later became superstars—joined him onstage for musical wrasslin' matches wherein whichever pencil-necked geek came out on artistic top was irrelevant as long as the resulting tuneage kicked major butt every which way but loose.

 $Ring\ Spiel\ Tour\ '95$ documents a night at the Metro in Chicago, where Watt's motley crew—which



Mike Watt Ring Spiel Tour '95 (Columbia/Legacy)

numbered among them Evan
Dando, Kathleen Hanna, Ad-Rock
and Mike D, Eddie Vedder, Dave
Grohl, Nels Cline and sundry
Sonic Youths—all sound lean and
hungry and ready for a challenge.
Growly Watt croons an opening cover of Daniel Johnson's
country-rock lope "Walking the
Cow" to warm up the crowd for
the chugging slide-guitar madness of Chip and Tony Kinman's
"Big Train." A duet with Vedder,

"Against the '70s," honors the decade in which Watt's head primarily resides; later in the set, Vedder debuts a tough-butt thing called "Habit," which would feature on Pearl Jam's '96 *No Code* album. A natural-born rule-breaker, Watt's expansive sound ears can be heard in the Beefheartian guitar chords and rhomboid beats of "Formal Introduction."

Through it all, Watt is good-humored and authoritative, his up-front bass heaving raw energy on a lot of his best originals, including "Drove Up From Pedro," "Chinese Firedrill" and "Piss-Bottle Man" (dedicated to Watt's dad), along with seemingly unironic covers of Blue Oyster Cult and Madonna songs. John Payne

MUSIC RECOMMENDATIONS



Meatbodies *Alice*(In the Red Records)

Yet another member of super-group Fuzz has spawned a stalwart side album, as Chad Ubovich's Meatbodies get the jump on freaking us all out in 2017. Meatbodies plunge into similar depths of distortion as Fuzz, as on "Creature Feature" and "Haunted History"; yet experimental

excursions like "The Burning Fields," "Scavenger" and the bare-bones jam-psych of the title track relocate the crew to a different alleyway than many garage bands. "Gyre" traverses a dark path on which you'll encounter an aural entity craving "skin and soul." Don't run—embrace it. Mark Miller



Mickey Hart Planet Drum (UMe)

In 1991, Grateful Dead drummer Mickey Hart invited an international group of percussionists into a studio collaboration using instruments like Mexican donkey jaws, rain sticks and nose flutes. In the process they created a gorgeous, airy, atmospheric dream-state, proving that they had more

in common than separated them. *Planet Drum's* 25th-anniversary edition couldn't be more timely, emphasizing cooperation over division. Notable participants in the sessions included Babatunde Olatunji (Nigeria), Zakir Hussain (India), and Airto Moreira and Flora Purim (Brazil). *Michael Simmons*



Gavin Bryars
The Fifth Century
(ECM)

Favoring wildly disparate sources for inspiration, composer Gavin Bryars is an outsider figure in contemporary classical music. Coming from a jazz background to explore John Cage-style minimalism-influenced concepts in heralded works like *The Sinking of the Titanic* (1969) and *Jesus' Blood Never*

Failed Me Yet (1971), Bryars has favored choral works in recent years. The Fifth Century sets the texts of 17th-century metaphysical poet Thomas Traherne and 13th-century Italian poet Petrarch in darkly radiant shimmerings in praise and wonderment of God, infinite space and earthly love. John Payne



John Sinclain Mobile Homeland (Funky D Records)

John Sinclair remains the High-phenate of Hip: a prodigious performance poet provocateur, tenacious cannabis advocate and Motor City musical maven. His latest disc is a killer Detroit reunion, produced by Tino Gross of the Howling Diablos and featuring blues, jazz and rock hotshots. "Send in

the Vipers" is a masterpiece, distilling the birth of jazz in minutes, with props to marijuana's "magical properties." And "Let's Call This—Rhythm Inning" recreates an imaginary baseball game featuring musical giants, with Sinclair's limitless imagination being key to all his playful work. *Michael Simmons*



Once & Future
Band
Once & Future
Band
(Castle Face Records)

What is past is now prologue, and Oakland's Once & Future Band embodies that sentiment with throwback art-rock that never loses sight of what's to come. Opener "How Does It Make You Feel?" is the best mini-epic Jeff Lynne of ELO never wrote, with elevating keyboard work and versatile

vocals by Joel Robinow. The bewitching "I'll Be Fine" is obscene, bitter Beatles, while Raze Regal's guitar on "Magnetic Memory" evokes the more emotional facets of prog progenitors Yes. Steely Dan is summoned for the jazzier "Rolando," about a chap who "likes to get high and dematerialize." Mark Miller

SIMPLY HEMP.







Pot vs. Pills

Will cannabis help end the opioid-abuse epidemic?

John Kagia is executive vice president of industry analytics for New Frontier Data



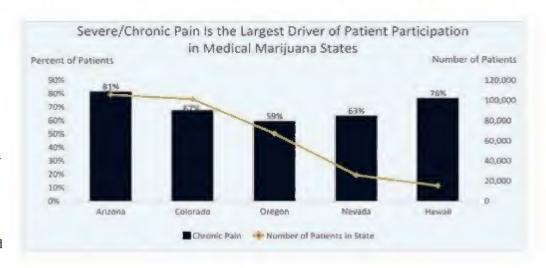
ITH THE ELECTION of Donald Trump and Republican majorities in Congress, the GOP has vowed to move forward with its longtime pledge to undo the Affordable Care Act. While it remains to be seen what approach the Republicans will take to replace the ACA, overhauling the country's health-care system presents a timely opportunity to address an epidemic gripping the nation: the explosive growth in opioid addiction and abuse.

The numbers are staggering. The total number of opioid pain relievers prescribed in the United States jumped from 76 million in 1991 to 207 million in 2013. In that time, Americans accounted for nearly 100 percent of the hydrocodone sales in the world and 81 percent of oxycodone sales. This explosive growth in opioid use has resulted in a surge of opioid-related deaths. In 2015, opioids were involved in 33,091 deaths, a fourfold increase since 1999 that accounted for 63 percent of all drug-related deaths. As a result of this increase, drug-related deaths for the first time exceeded the number of deaths from car crashes in the United States.

With over two million Americans addicted to prescription painkillers and an additional 600,000 addicted to heroin, there's a growing urgency to find alternative therapies that can slow or reverse this epidemic.

Cannabis presents a significant alternative. It's been found to be beneficial in treating chronic pain, neuropathic pain and the spasticity associated with multiple sclerosis-conditions for which opioids are commonly prescribed. Additionally, researchers are investigating whether its neuroprotective properties also help reduce the likelihood of becoming dependent on opioids when both are used together.

More research is essential, but the substitution of cannabis for painkillers has already begun. A recent analysis of the Medicare program found that drug prescriptions fell significantly in states where medical marijuana was legal. Doctors in legal-marijuana states prescribe



The total number of opioid pain relievers prescribed in the United States jumped from 76 million in 1991 to 207 million in 2013. In that time, Americans accounted for nearly 100 percent of the hydrocodone sales in the world and 81 percent of oxycodone sales.

an average of nearly 1,800 fewer doses of painkillers per year than those in states without medical cannabis.

Patients suffering from pain are the biggest drivers of the demand for medical marijuana. Analysis by New Frontier found that chronic-pain patients accounted for the largest proportion of medical marijuana patients in states that allow pain as a qualifying condition. In the five states analyzed, chronic-pain patients accounted for well over half of medical marijuana patients. In Arizona alone, pain sufferers account for 81 percent of registered patients, the most in any state.

Pharmaceutical companies are watching these developments closely; the increased substitution of medical cannabis for opioids could significantly impact their bottom line. The top three pain medicines in the Medicare program-OxyContin, hydrocodone and Fentanyl-accounted for \$1.96 billion in prescriptions in 2013 alone.

With so much revenue at stake, it's not surprising that opioid manufacturers are investing money in preventing the expansion of legal cannabis. In 2016, Insys Therapeutics, the manufacturer of Subsys-one of the most potent and expensive opioids

on the market-donated \$500,000 to oppose adult-use legalization in Arizona. The donation made Insys the third-largest funder of the opposition campaign, and it was a key contributor to the failure of the legalization ballot measure.

Insys claimed that it opposed the measure "because it fails to protect the safety of Arizona's citizens, and particularly its children." However, the company's motives may not have been entirely altruistic: Insys admitted in a filing to the Securities and Exchange Commission that legal marijuana poses a direct threat to its product lines, including a product under development called Dronabinol Oral Solution, which uses synthetic THC to treat the nausea and vomiting associated with chemotherapy.

The tension between pharmaceutical companies and legal marijuana will likely continue for many years to come. However, at a time when tens of thousands of Americans are dying from opioid overdoses and millions more are dealing with the scourge of opioid addiction, it's imperative that lawmakers, drug manufacturers and health-care providers find ways to solve this catastrophic epidemic. A solution may be as close as your nearest dispensary. 💥

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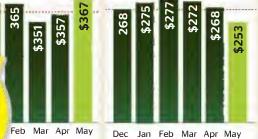
MARKET ANALYSIS

Prices by the ounce

All indices, with the exception of the Southern Index, finished May below their previous month's average. The Western Index dropped for the third straight month, falling to just \$253 an ounce. The Southern Index jumped \$10 from its April average, raising its year-to-date average to a whopping \$359 an ounce.

US Price Index YTD Average: \$328 Eastern Index YTD Average: \$352 Dec Jan Feb Mar Apr May Dec Jan Feb Mar Apr May Southern Index YTD Average: \$359 Western Index YTD Average: \$268

(Kush) "Definitely worth every penny." -Hilliard, OH



TRANS HIGH MARKET QUOTATIONS

STATE	CITY	STRAIN	PRICE
ALABAMA	Birmingham	Blue Dream	\$350
ARIZONA	Phoenix	Green Crack	360
CALIFORNIA	Humboldt County	Strawberry Dreams	100
COLORADO	Rico	Nicole Kush	180
CONNECTICUT	Hartford	Northern Lights	330
FLORIDA	Miami	Jack Herer	375
GEORGIA	Atlanta	Platinum Kush	360
HAWAII	Maui	Girl Scout Cookies	350
ILLINOIS	Chicago	Critical+	360
INDIANA	Indianapolis	Grape Ape	360
KANSAS	Topeka	Trinity	275
KENTUCKY	Florence	Kush	500
LOUISIANA	New Orleans	Gorilla Glue #4	380
MAINE	Portland	Chem Dog	300
MARYLAND	Baltimore	Headband	400
MASSACHUSETTS	Boston	Sour Diesel	360
MICHIGAN	Detroit	Blue Dream	350
MINNESOTA	St. Paul	Trainwreck	360
MISSISSIPPI	Jackson	Bubblegum	375
MONTANA	Helena	OG Kush	280
NEVADA	Las Vegas	Deadhead OG	380
NEW JERSEY	Trenton	Godfather OG	320
NEW YORK	Brooklyn	Strawberry Banana	380
NORTH CAROLINA	Raleigh	Super Silver Haze	360
ОНЮ	Hilliard	Kush	375
OREGON	Portland	Guava Chem	200
PENNSYLVANIA	Philadelphia	Purple OG	350
RHODE ISLAND	Providence	Blue Dream	325
SOUTH DAKOTA	Pierre	Purple Haze	350
TENNESSEE	Nashville	Girl Scout Cookies	275
TEXAS	Austin	Ghost Train Haze	300
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VERMONT	Burlington	Bruce Banner	330
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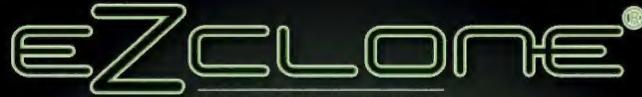
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Relaunching an American industry is hard but vital worknon-whiners preferred. *By Doug Fine*

Hemp Ninja



May 20.7 High Times 45

Training

hen you go from consumer to producer (of anything), your units of measure change. I've spent much of the past three years—in my customary role of comedic investigative journalist, camera crew in tow—surveying hemp farmers from Oregon to Kentucky. But in 2016, I became a hemp farmer. Which meant my shopping list grew from 16-ounce bottles of Nutiva hemp-seed oil to rodent-proof storage bins for two tons of hemp seed.

Even with my family's considerable omega-3 needs, that's an amount I would be hard-pressed to argue was for personal consumption. That's because, along with 816 other licensed American farmer-entrepreneurs in 15 states (and counting), I'm trying to help birth an independent agricultural resurgence in the digital age—not while clutching a latte in a heated boardroom, but in an icy Vermont maple-sugar shack processing hemp that was planted from seed way back in the innocent spring of 2016.

And here's the real reason why I'm



grateful to shiyer: The petrochemical era is winding down. It worked for a little while, if you don't count a planet half-poisoned. But when the dinosaur juice we call oil no longer flows in viable quantities, we still have a shot at keeping the digital good life going. Visualize plants, fungi and algae providing everything from aerospace parts to car batteries. Actually, you don't have to visualize: It's already happening.

To demonstrate this near-future industrial revolution, I travel everywhere with a plastic goat, 3D-printed in Colorado from Colorado-grown hemp.

In hemp's fiber lies our

next-generation bio-composites and bio-reactor feedstock—plus our food, solar collectors and books. And as the demand grows for all of hemp's applications (nutraceuticals are a major space at the moment), each acre planted to power this new bio-based economy will remove carbon from the atmosphere. How? By building healthy soil—perhaps our single highest-impact tool for environmental remediation and climate mitigation.

There is, of course, one little step before hemp and other bio-materials buy humanity a couple of centuries to completely work regenerative practices into the economy's fabric. That step is creating an industry.

After a 77-year break, the hemp industry's resurgence became possible thanks to Section 7606 of the 2014 Farm Bill, which removed cannabis with less than 0.3 percent THC from the Controlled Substances Act (CSA) for farmers conducting research (including marketing research) as part of state hemp programs.

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On the ground in 2016, this legislation meant that the nation's emerging hemp farmers earned a start-to-finish, high-level ninja-training seminar called "Launching an Industry in an Unfriendly Business Climate." For me personally, just making it to the frozen-fingers-in-themaple-shack phase feels like one of those accomplishments I'll someday relate to the grandchildren.

Keep in mind, I had to cultivate in Vermont in the first place because my own governor vetoed New Mexico's bipartisan hemp bill in 2015, thus pushing this erstwhile regenerative entrepreneur 2,500 miles east. And I'm not the only one: Iginia Boccalandro's Fat Pig Society Co-op in Fort Collins, Colorado, grew a \$300,000 crop in its debut season. "I'd love to still be [home] in New Mexico," she told me. Instead, she and I are building the hemp industry elsewhere—for now.

The Hempire Strikes Back

Given the many potential benefits for the soil and the economy, the modern hemp industry's early players stood ready to weather Mother Nature's whims, the evolving-by-the-week patchwork of interim state and federal legislation that allows our existence, and—perhaps most threateningly—the ravenous appetite of birds for omega-rich hemp seeds as they mature on the vine. (I spent a fair part of the 2016 season yelling at finches.)

Yes, those of us with multiyear game plans, at least, could handle these hurdles. We got our crops planted. We got the harvest in. We worked on preparing the resulting healthy products for folks. The collective mood could be described as "phew."

Then, on December 14, our public servants in the DEA's administrative echelons published a rule change surrounding non-psychoactive cannabis extracts. Several of my colleagues called me, rattled, and one big cultivator confessed in social media to being "terrified."

This category shuffle was evidently in the bureaucratic pipeline for five years. It was a rule notice published in the Federal Register that established a Schedule I code under the Controlled Substances Act for cannabis-plant extracts. The problem with that action, according to Michael Bowman, chair of the National farmers with whom I hang are serious about making every effort to comply with both state and federal law.

Bob Hoban, managing partner at the Hoban Group, the nation's largest cannabis-focused law firm, notes that "when it comes to the cannabis plant, the facts seem not to matter." Hoban has filed a lawsuit on behalf of a group that includes The Hemp Industries Association, RMH Holdings and Centuria Natural Foods to challenge the DEA's new classification. "This action is not only wrong; it has strong potential to negatively impact hemp farmers and processors who are trying to make a legal living in the real world," Hoban says.

Speaking for all three families in our Vermont group, called the Family Green, I can tell you there's a lot riding on this. Like, you know, much of our collective savings.

Indeed, the news was jolting. Prior to December 14, most hemp farmers I knew in the US felt that the legislative battles were over. Heck, in a 2013 *New York Times* article, a DEA spokesman stated, "Hemp farmers are not on our radar."



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"Farmers want it," was how Representative James Comer (R-KY) put it when we spoke at a congressional hemp summit last February.

"It's insane that I can buy hemp seed in Costco, but farmers can't commercially grow it here," Senator Ron Wyden (D-OR) said at the same event.

Up in Vermont, we fully believe that federal law allows our cultivation and marketing of hemp, as long as it's part of the research associated with a state agricultural-hemp program or university. Ours is. So we feel—or *should* feel—safe.

Within 48 hours of the DEA's rule-change listing, Eric Steenstra, executive director of the DC-based Hemp Industries Association, sent off a note to HIA's 500 members stating that the rule "did not change the status of CBD" and that the organization "is ready to take action to defend should DEA take any action to block the production, processing or sale of hemp."

My colleague Rick Trojan, a fellow who read my book *Hemp Bound* in 2014 and, two years later, planted 2,500 acres with his Colorado Cultivars operation—only some of which was destroyed by freak hail—said: "We're watching the new administration policy, but we are not changing our game plan one bit from the one we had the day before the

DEA's rule change."

Know who else isn't? Wal-Mart, evidently, where as of this writing you can buy all kinds of healthy CBD products.

Shivering back in in the Green Mountain State, we're not deterred either. This is a moral issue for the Family Green. One of my farming partners, Robin Alberti, finances her share of our endeavor by waitressing, and she says she explicitly turned to hemp "so my kids will have a way to stay in this beautiful area."

So we're processing in a maple-syrup shack and passionately trying to produce healthy products, starting with a hemp lotion and then, next year, adding hemp-seed superfoods.

But the moral imperative isn't the only reason I'm personally working so hard on this Vermont project, and on all my hemp endeavors around the world. We must succeed because the old agricultural economy is collapsing. Our third Vermont farming family, the Williamsons, make almost no money on their existing hay business. "It's hardly worth it to plant," John Williamson told me.

In hemp, close to a thousand Americans to date see an opportunity for farmers worldwide to enjoy economic prosperity in the digital age. Bowman envisions this opportunity coming in

the form of an updated Homesteading Act, providing incentives for cultivators, processors and marketers of regenerative crops like hemp.

One way this might work would be through baseline soil testing: rebates, credits or subsidies for every inch of healthy polyculture soil created. However it evolves, sooner or later the official US policy toward hemp on every level will be: "How can we thank you for putting farmers back to work and healing the soil in the process?"

Meanwhile, let's look at the merits of these administrative shenanigans. Even if you're one of those folks who's still afraid of THC, on the same day that the DEA announced the rule change, a National Institutes of Health-funded survey reported that cannabis-use rates among young people declined for the third consecutive year, which the survey's director called "encouraging and important."

Which is great. And our hard-working DEA field agents needn't be bored: Pharmaceutical-drug abuse and heroin epidemics are rampant. Nearly 34,000 people died from prescription opiates in 2015, according to the Centers for Disease Control. That's almost four people per hour—one since you've started reading this dispatch.



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Hemp's bipartisan friends in Congress are already thinking beyond the current research provisions. Representative Thomas Massie (R-KY) asked me in the first minute of our first meeting, "Do we need to raise the federal definition of hemp to I percent THC?" (Yes, as a start. Tasmania and Thailand have already done this, and it's important because the arbitrary 0.3 percent THC level for hemp caused 28 percent of Colorado farmers to test "hot" in 2016. This included, within the margin of error of some machinery, good friends of mine on the Western Slope—a couple with two kids—who had just invested in a combine for a crop they wound up not being able to harvest. This cannot be tolerated.)

"Hemp is no longer controversial," said Steenstra of the plant's support in Congress.

The moral imperative isn't the only reason I'm personally working so hard on all my hemp endeavors around the world. We must succeed because the old agricultural economy is collapsing.

And so it was with the weary sigh of a Drug War field correspondent who has seen this part of the cycle a few times before that I told my Vermont partners what likely comes next: Probably via rider, Congress will get more explicit in its wording to protect hemp cultivation. This will plug the latest gaps that the DEA—a bureaucratic entity seeking to preserve its budget contrary to the well-being of the people it exists to serve—has attempted to exploit. And all this while we wait for the inevitable full commercial legalization of hemp to

put the issue to rest once and for all.

Trojan believes that the opposition's bureaucratic mindset is both its weapon and its weakness. "They're shooting themselves in the foot with delay tactics that are contrary to law and public opinion," he says.

But that's a tough thing to explain to a Vermont farmer with a mortgage, an '86 John Deere harvester in the field and a slightly newer pick-up truck on the blink. "Oh, it's Newtonian, John," I told my partner, surrounded by a lot of hemp and maple syrup. "The bureaucrats act, our allies react. It helps us in the long run."

To his credit—given that his farm address is our company HQ—John said that he is "not losing any sleep" over this latest mining of the harbor by the retreating Drug Warriors.







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Thomas Jefferson Sleeps Better Now

The Family Green team and I were borderline hypothermic (and also slightly euphoric) as we donned our aprons and set to work making a batch of Hemp in Hemp, our sun-grown, farmpressed Vermont hemp-seed oil, infused with flowers from the same harvest. Sure smells terpene-licious. Smells like victory.

And we in the Family Green are not alone in feeling like a success overall: 9,650 aces of Thomas Jefferson's favorite crop were cultivated in 2016, up from zero in 2012, according to the HIA.

The value of this domestic crop is difficult to assess, because

the market is so new. But the North American industry crossed the half-billion-dollar mark last year, according to the HIA, and the CBD side of the US market alone was worth \$115 million, according to the *Hemp Business Journal*.

This is a tremendous achievement for any new industry. Remember that just three years ago, no hemp was legally cultivated in the United States. In 2016, 5,800 outdoor acres were planted in the Rocky Mountain State alone—more than the previous year's total acreage nationwide. One of those contributing entities is Boulder, Colorado's EvoHemp, which sold one million all-organic nutrition bars last year and is sourcing its hemp domestically this year. Kentucky's industry has grown 7,000 percent since 2014—and it's slated to triple again in 2017.

And that's with 99.5 percent of American homes having no hemp products in them as yet, according to a Canadian study. In other words, we're nowhere near market saturation for any part of the plant—fiber, seed or flower.

Our Family Green project in Vermont—which, incidentally, dry-cropped and thus used no irrigation water—has already produced a couple tons of hemp, created two jobs and sequestered close to seven tons of carbon (depending on how one measures it). We officially contributed 23 acres to that national cultivation total (really more like 22.5, after accounting for about six different field robberies).





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"Now you know what it takes to be an entrepreneur," as Thornton Melon would say in *Back to School*. No point whining.

For all the dramatic twists that 2016 provided, the legal hemp industry—despite all the immersion-therapy techniques employed by the universe's ninja trainers—is undeniably off to an incredible start. Indeed, if you take one thing from this dispatch, I hope it's this: American hemp is exceeding the most optimistic predictions of three years ago, largely because all the existing offshore prognosticators (as I predicted they would in *Hemp Bound*) have underestimated the bottom-line value of the American go-get-'em spirit.

We don't care that 90 percent of new businesses of any kind fail. We've been waiting for this moment for much of our lives. Hemp cultivation is legal again, and we believe that this plant will play an integral role in the survival of our species.

If I were to assess the biggest challenge facing the industry,



Fine views cultivating hemp as a patriotic act.

it would have nothing to do with the Drug War's final battles. Rather, it would be the challenges of scaling up. First off, there's the essential issue of a steady supply.

"What hurt hemp in its last resurgence in the 1990s was that when a product got popular, there often wasn't enough hemp to support the growth," says Edgar Winters, an Oregon farmer who first cultivated hemp in Alabama in 1957. (His grandfather rightly believed that hemp twine outperformed the new synthetic-hay baling twine that to this day pollutes our range lands.)

Can we meet that demand this time around? Rick Trojan thinks so. Colorado Cultivars is expanding from 2,500 acres to 5,000 in 2017, mirroring the industry growth nationwide. He ain't blinking.

And we're not talking about just any old kind of growth. For dozens of early players in the modern hemp industry, regenerative growth that benefits the farmer (for once) is key. The business term for this is "vertical integration": The producer shares fully in the final product's value. That's why Boccalandro's Fat Pig Society operates as a co-op that spreads its revenue back to the farmers who grew the plants. "We'd rather see 1,000 farmers growing 10 acres than one farmer growing 10,000 acres," Boccalandro says.

So thanks for helping us build this market. Let's get hemp's market penetration up to 7 percent by this time next year, so that the percentage of Americans who are farmers increases from today's 1 percent to at least the 30 percent that existed at prohibition's inception, if not the 90 percent in Tom Jefferson's day. Because with more soil caretakers, we have a shot at mitigating climate change. I call that fighting for my family's survival. That's why I grow hemp. \checkmark



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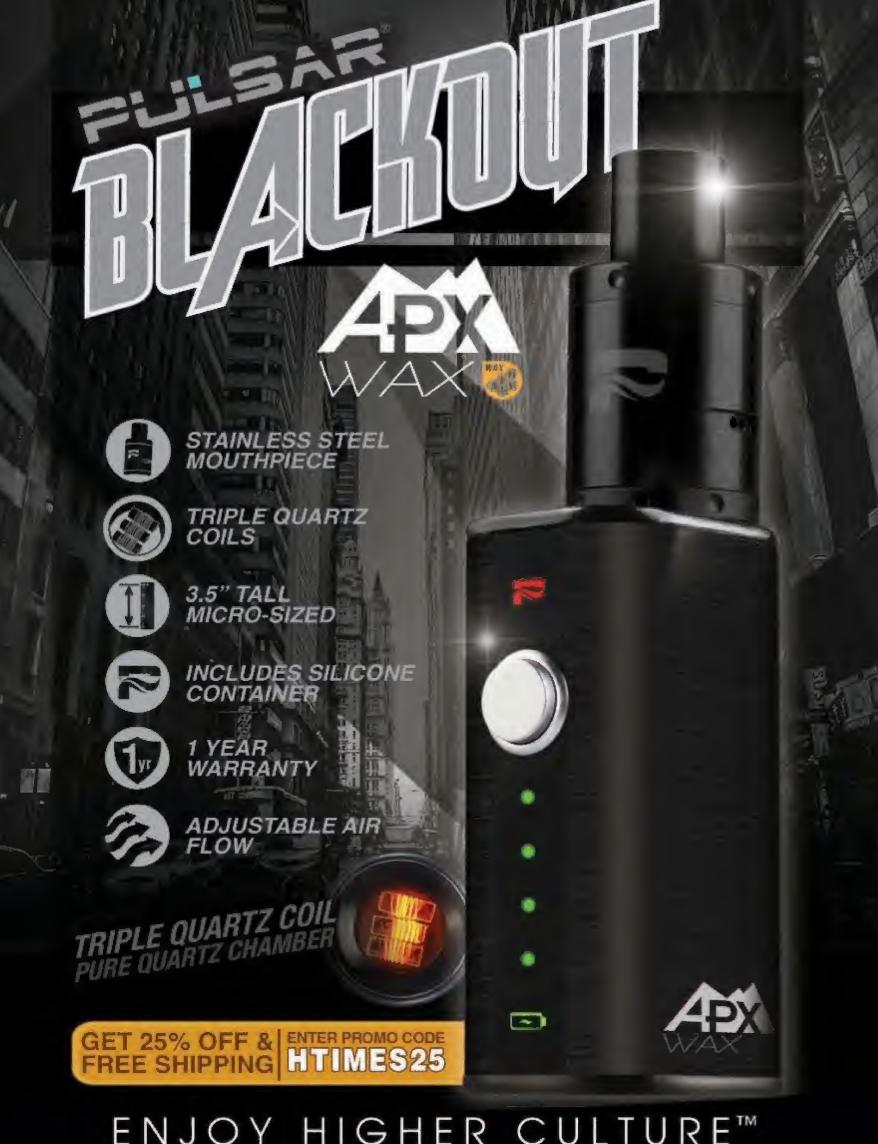
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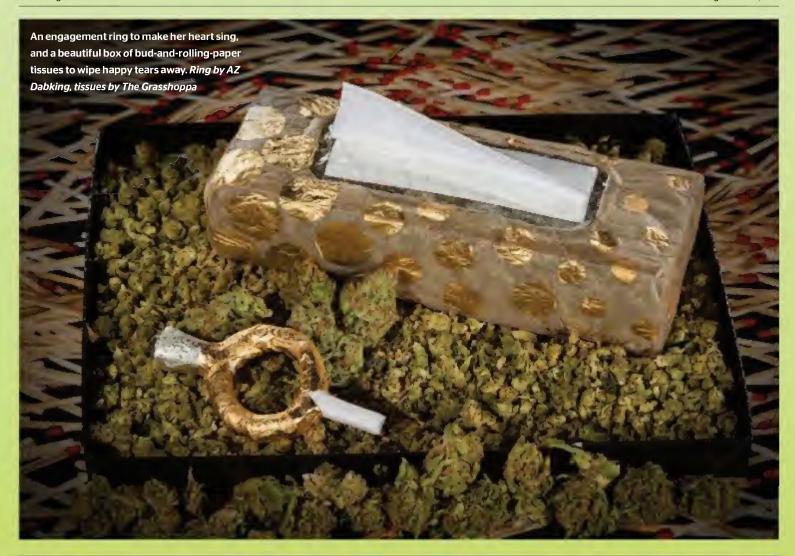
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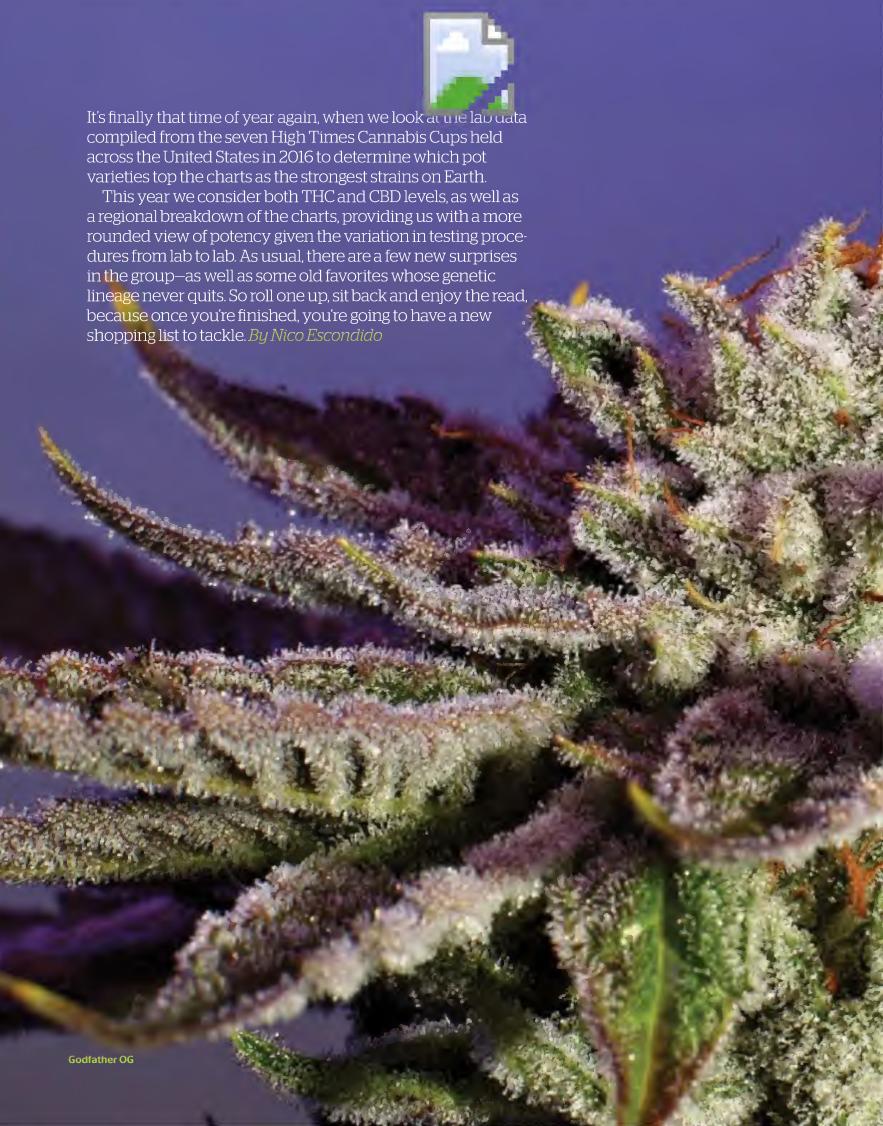




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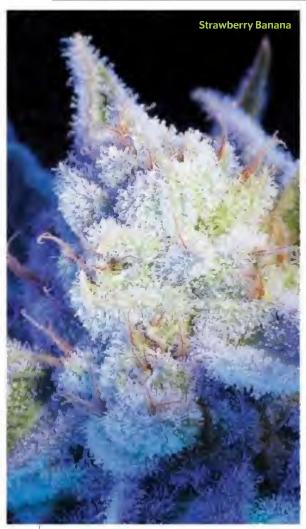
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1st (1)	Godfather OG	CHR LA Private Reserve	February	Medical <i>Indi</i> ca	34.04
2nd (2)	Super Glue	Sun Grow & Slab Co.	February	Medical Hybrid	32.14
3rd (3)	Strawberry Banana	Greenwolf LA & Green Country Rebellion	February	Medical Hybrid	31.62
4th (4)	Venom OG Kush	Cali Kush Farms & Greenwolf LA	February	Medical <i>Indi</i> ca	31.04
5th (5)	Redeye OG	Cannabiotix	February	Medical <i>Indi</i> ca	29.69
6th (6)	Ancient OG (Bodhi Seeds)	Magnolia Wellness (Oakland)	February	Medical Hybrid	29.65
9th (7)	Wedding Cake	Jungleboyz	October	Medical <i>Indi</i> ca	29.24
10th (8)	Strawberry Banana	Zienstein Gardens	February	Medical <i>Indi</i> ca	29.18
11th (9)	Vegan Velvet Kush	Vegan Buddha & New Amsterdam Naturals	February	Medical <i>Indi</i> ca	29.18
12th (10)	Million Dollar OG	CHR LA & Gold Thumbs	February	Medical <i>Indi</i> ca	29.14

State/Region: Southern California 2016 Cannabis Cups: February, April and October Lab-testing partner: Canna Safe Analytics, Murrieta, CA Lab equipment: High-performance liquid chromatography (HPLC)

Notes: Godfather OG, an *indica*-dominant hybrid (Cherry Pie x Granddaddy Purps x OG Kush), broke the previous Cannabis Cup record of 32.13% THC held by Chem Dog from Next Harvest in Denver. Also note that the 34.04% is an activated THC value calculated using (THC-A x 0.877) + THC, meaning this is a somewhat conservative number to some folks. Very fine work by the crew at California Herbal Remedies (CHR).

- This is the third straight year that Strawberry Banana has appeared on our "Strongest Strains on Earth" list. In 2014, the Banana OG x Bubblegum cross hit 22.51% THC. In 2015, she climbed to 28.4%. In 2016, we saw her hit 29.14% and 31.62% in SoCal alone... with more to come in 2017.
- Wedding Cake is a newcomer to The List this year, even though she first appeared in our Cup competitions back in 2014. Cultivated by the popular grow team know as the Jungleboyz, Wedding Cake is a cross between Girl Scout Cookies and Cherry Pie.
- Super Glue, by Sun Grow, is a hybrid mix of Afghani Kush x Northern Lights #5. It was grown from clone hydroponically using Advanced Nutrients.

2016 Rank (Regional #)	Strain	Competitor	Cup	Category	THC Potency
16th (1)	A-Dub	MMJ America Downtown & the Vault Genetics	April	Medical Hybrid	28.78
27th (2)	White Fire OG	Native Roots Colorado	April	Medical <i>Indi</i> ca	27.44
32nd (3)	Chem D.O.G.	Next Harvest	April	Medical <i>Indi</i> ca	27.04
37th (4)	Ghost Train Haze	Green Man Cannabis (downtown)	April	Medical Sativa	26.86
39th (5)	G6 #3	Medicine Man	April	Medical Hybrid	26.72
40th (6)	Gorilla Glue	Natural Remedies/ Organic Greens	April	Medical Hybrid	26.66
45th (7)	Chem Forum	Herbal Remedies & Root- seller Seeds	April	Medical Hybrid	26.22
47th (8)	Rosé	Green Man Cannabis (Hampden store)	April	Medical <i>Indi</i> ca	26.17
55th (9)	Gorilla Glue #4	MMJ America Sheridan & the Vault Genetics	April	Medical Hybrid	25.73
57th (10)	Motor Breath	Green Man Cannabis (downtown)	April	Medical <i>Indi</i> ca	25.56

State/Region: Colorado 2016 Cannabis Cups: April

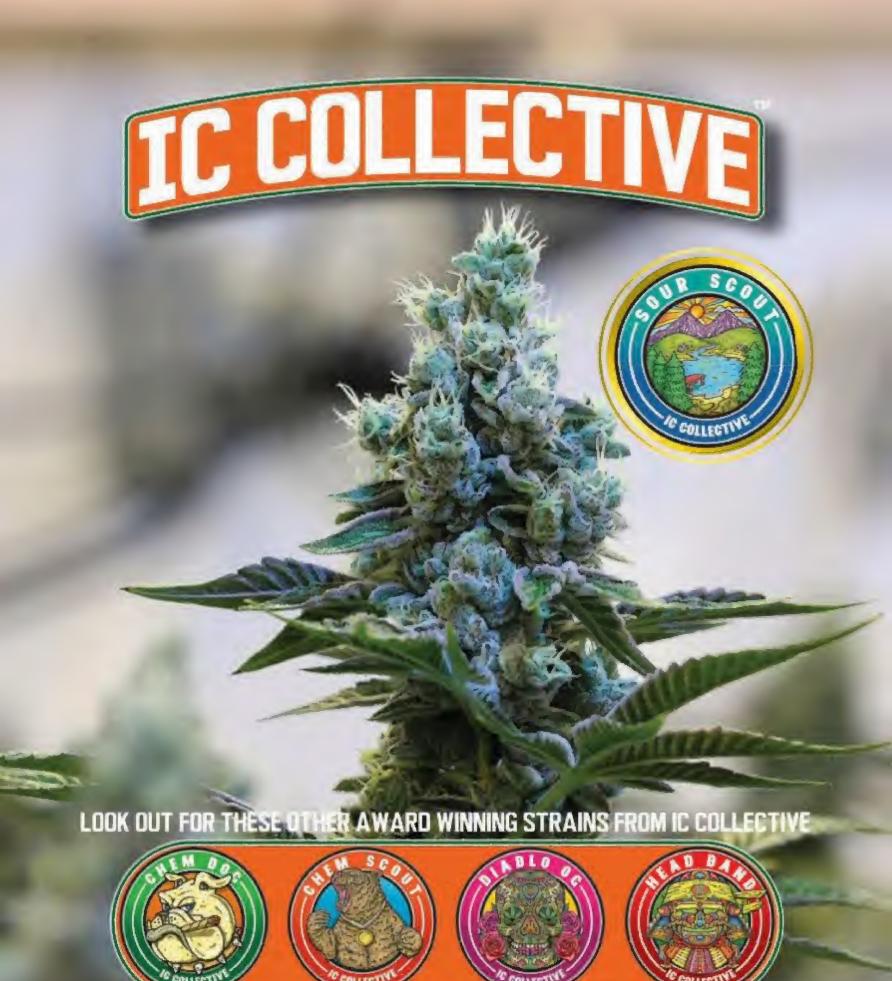
Lab-testing partner: Agricor Laboratories, Denver, CO

Lab equipment: High-performance liquid chromatography (HPLC)

Notes: A-Dub, an epic triple cross of Chem's Sister x Sour Dubb x Alien Dawg, is a well-balanced hybrid made special by the Sour Dubb, a hard-to-find clone-only strain also known as Sour Dubble (possibly a Sour Diesel x Sour Bubble cross). The A-Dub was grown with a 56-day flowering time by MMJ America and the Vault Genetics, who appear twice on The List (also with Gorilla Glue at #55).

- The Ghost Train Haze has been named the Strongest Strain on Earth (twice!), first appearing in our inaugural "Strongest Strains" feature in 2012, and then popping up on our June 2015 cover—and reaching 27.46% THC in our Michigan Cannabis Cup the previous year. This Denver cut was grown by Green Man Cannabis, who also grew the Rosé, a clone-only OG phenotype.
- Motor Breath, the third entry on the 2016 list from Green Man Cannabis, is a heavy *indica* cross of Chem Dog x SFV OG. It was grown organically in soil with a flowering time of eight and a half weeks.
- Second only to the A-Dub in flavor, the G6 #3 did exceptionally well with judges in the taste category, not to mention hitting 26.72% THC. Cultivated by the well-known Medicine Man of Denver, she's a hybrid of Aspen OG and High-Country Diesel. Grown in coco and hand-watered with a 67-day flowering time, the G6 #3 received a lot of love, and it showed.





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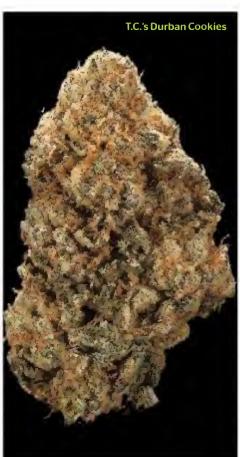
Reading the Rankings

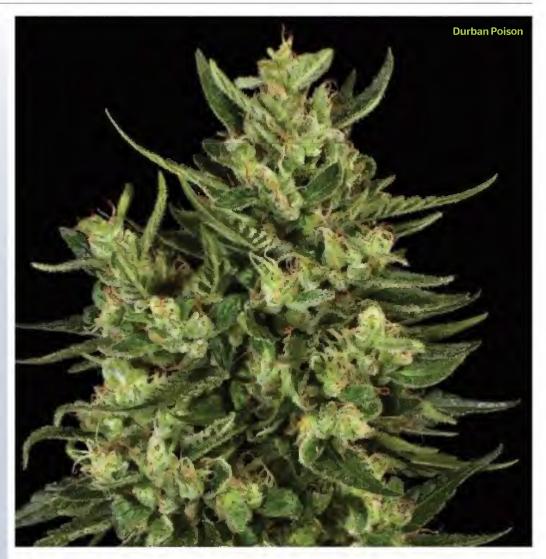
This year, we made one small upgrade to our rankings: Along with separating The List into regional charts, as we've done in years past, we have now included each strain's regional ranking (in parenthesis) along with its overall national ranking, comparing each one to the entire field of competition for 2016. This overall national ranking spans all seven Cannabis Cups held across the country. (Note, however, that this does not include the CBD chart, which is not regional, but rather a national chart for the entire year.)

Additionally, people may wonder why some regions' potency levels appear higher across the board than others. That's a very fair question, and as we've discussed in years past, it all comes down to the individual labs and their testing protocols. Unfortunately for us—and for the industry as a whole—there is not yet a national association able to set consistent standards and practices for testing cannabis (and there likely won't be such an agency until federal laws change). That said, we are meticulous in choosing our lab-testing partners for our various Cannabis Cup competitions, and we feel confident that our partner labs all adhere to the same basic set of guidelines when testing these flower entries.

However, from a regional perspective, the basis for comparison is a level playing field; it's in the national rankings that any disparities in testing protocols will be revealed. Hence we break down the rankings into regions, but we're also now giving you the national rankings for a slightly different perspective, even if they're to be taken a bit more lightly.

As always, many thanks to Canna Safe Analytics in Murrieta, California; Agricor Laboratories in Denver; PSI Labs in Ann Arbor; and Steep Hill Labs in Berkeley for all their support and excellent work, and for the contributions they've made toward fair and accurate testing.





2016 Rank (Regional #)	Strain	Competitor	Cup	Category	THC Potency
7th (1)	T.C.'s Durban Cookies	Herbal Solutions Ypsilanti/ Oasis Medical Seeds	August	Medical Sativa	29.56
8th (2)	Motor Breath	Herbal Solutions Ypsilanti	August	Medical <i>Indi</i> ca	29.41
21st (3)	Strawberry Banana	Fly City Meds	June	Medical Hybrid	27.8
23rd (4)	White Fire OG (a.k.a. WiFi OG)	MichiganWorkz	June	Medical Hybrid	27.68
33rd (5)	Sunshine #4	Midnight Roots & Herbal Solutions	June	Medical Hybrid	27.04
34th (6)	Scott's OG	Arborside & Redeye Medical	August	Medical <i>Indi</i> ca	26.98
46th (7)	Purple OG	Herbal Solutions	August	Medical <i>Indi</i> ca	26.19
53rd (8)	Girl Scout Cookies	Elevate Farms	June	Medical Hybrid	25.82
58th (9)	Purple Chem	RI Finest with #TheFinerSide	June	Medical <i>Indi</i> ca	25.48
62nd (10)	Wookie Cookie #2	Bud White & Interlochen Alternative Health	August	Medical <i>Indi</i> ca	25.17

State/Region: **Michigan**

2016 Cannabis Cups: June and August

Lab-testing partner: PSI Labs, Ann Arbor, MI

Lab equipment: Gas chromatography/flame ionization detector (GC/FID)

NOTES: Grown by Trichome Charlie of Oasis Medical Seeds, T.C.'s Durban Cookies is a Durban Poison backcross [(Durban Poison x OGKB) x Durban Poison] as well as the first Durban hybrid to cross the 25% threshold in any Cannabis Cup. The OGKB is also known as OGKB GSC (Girl Scout Cookies).

- 2016 was a banner year for Herbal Solutions in Michigan: They took home four first-place Cups and had a total of seven top-three finishes across two Cup competitions (June and August). You may also have noticed that they appear on The List four times, more than any other company in the past year.
- Sunshine #4 is appearing on The List for the second consecutive year. This strain is a cross between Sunshine Daydreamer (Bubbashine x Appalachia) and Chem Dog #4. Bred by Bodhi Seeds and grown by Midnight Roots, this is a strain on the rise.
- Bud White and Interlochen Alternative Health were first-time competitors in 2016—and became winners on their first go (second place, Best *Indica* Flowers). For those of you wondering, Wookie Cookie #2 goes like this: Wookie Cookie #1 Bx (backcrossed to itself) x Sensi Star, where Wookie Cookie #1 = Death Star x GSC. Got it?
- Yes, WiFi OG is the new name for White Fire OG (Fire OG x the White), which dates back at least half a decade. Its 27.68% THC is the highest level we've ever seen for the strain at a Cannabis Cup.

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Terpenes (mg/g)

Myrcene, 5.72

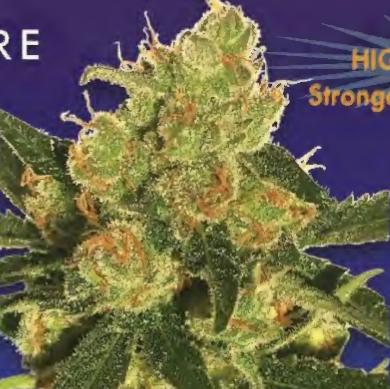
β Caryophyllene, 3.50

Limonene, 2.06

α Humulene, 1.32

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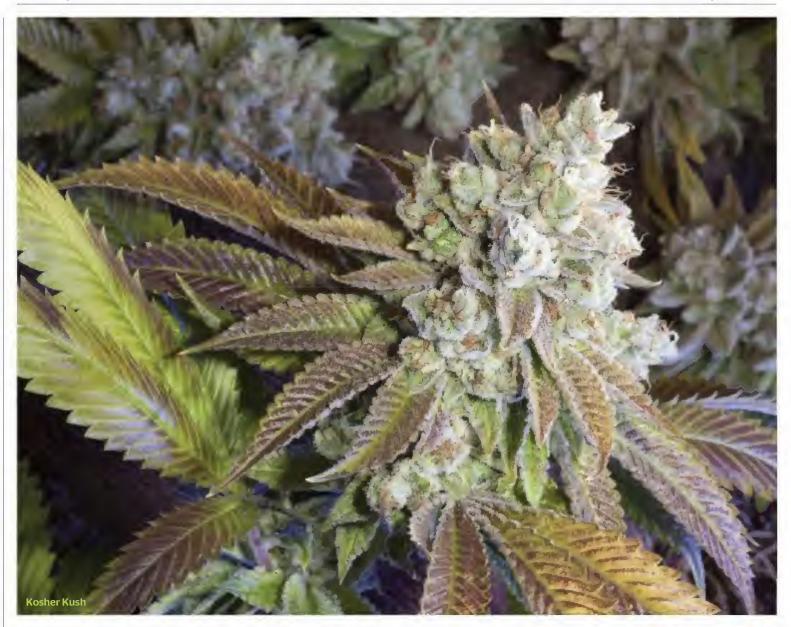




Dragonfly

Dragon Cookie

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2016 Rank (Regional #)	Strain	Competitor	Сир	Category	THC Potency
26th (1)	Boss Frost	Vimutti	June	Medical <i>Indica</i>	27.5
60th (2)	Sour Scout #1	IC Collective	June	Medical Hybrid	25.2
61st (3)	Apple Fritter	The Great Indoor Dispensary	June	Medical Hybrid	25.2
66th (4)	Kosher Kush	CannaCruz Collective	June	Medical Indica	25.0
86th (5)	Elmer's Glue	CannaCruz Collective	June	Medical Hybrid	24.4
98th (6)	Dos-Si-Dos	AlienLabs	June	Medical Hybrid	24.0
112th (7)	Kush Company OG	Kush Company	June	Medical Indica	23.7
120th (8)	Sour Tangie	CannaCruz Collective	June	Medical Sativa	23.5
131st (9)	7 Stars Kush	7 Stars - Richmond	June	Medical Indica	23.3
137th (10)	Sour Girl	C.R.A.F.T.	June	Medical Hybrid	23.2

State/Region: Northern California

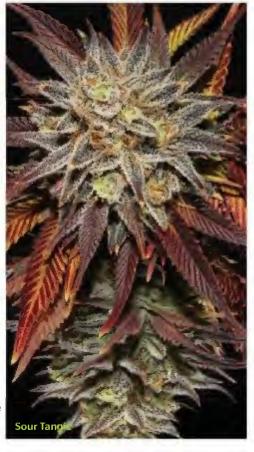
2016 Cannabis Cups: June

Lab-testing partner: Steep Hill Labs, Berkeley, CA

Lab equipment: QuantaCann 2 and high-performance liquid chromatography (HPLC cross-reference)

NOTES: Elmer's Glue, from the fine people at CannaCruz Collective, is a brilliant cross of Gorilla Glue #4 (female) x the White (male). A clear trend seems to have emerged in 2016: The White alone = okay, but the White + something nice = fire!

- Amazingly, the great growers at C.R.A.F.T. had to "sneak" onto The List this year with their Sour Girl (Sour Diesel x GSC) at 23.2% THC—a clear indication that THC levels are skyrocketing. For reference, our first "Strongest Strains on Earth" feature from 2012 had OG Ghost Train Haze topping the charts at 25.49% THC.
- Boss Frost (aka the Frost Boss) is an unknown genetic. The best guess by Vimutti growers? A possible Grease Monkey strain—whose total terpene concentration surpasses 6% (that's extremely high).
- Apple Fritter received some of the highest scores from judges at the 2016 NorCal Cup in the categories of taste and aroma. A hybrid of Sour Apple (Sour Diesel x Cinderella 99) and Animal Cookies (GSC x Fire OG), she has the flavor to go with her 25.2% THC level.









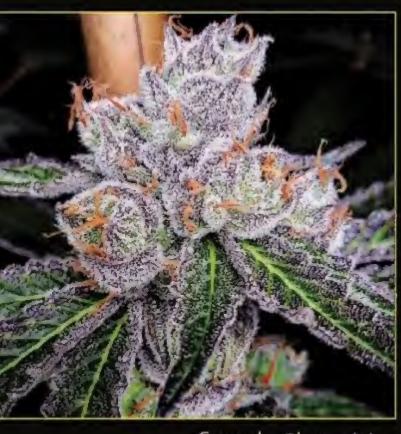




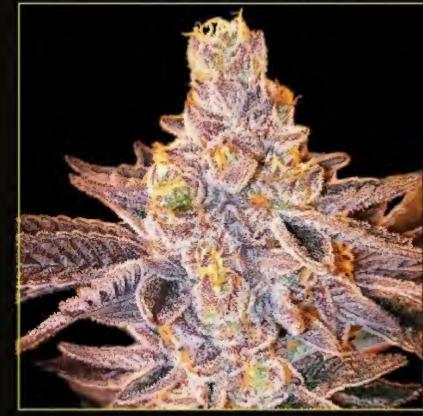
SOUR APPLE HAZE

APPLE FRITTER

North-Cal High Times Cup 2016 3rd Place Award Winner North-Cal High Times Cup 2016 2nd Place Award Winner



Grown by @Lumpstatus



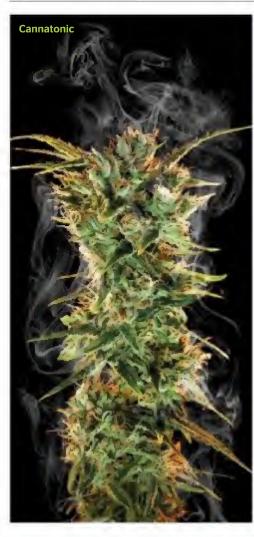
Grown by @Greenmile2015

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2016 Rank (Regional #)	Strain	Competitor	Cup	Category	CBD Potency
1st (1)	Cannatonic#4	Herbal Solutions/Plant 4 2morrow	October (LA)	CBD Flowers	22.77
2nd (2)	Ringo's Gift	3rd Gen Family	April (LA)	CBD Flowers	20.23
3rd (3)	Cali Cure	Hermosa Seeds	October (LA)	CBD Flowers	19.92
4th (4)	Desert Ruby	The Green Solution	April (Denver)	CBD Flowers	17.48
5th (5)	CBD OG	C.R.A.F.T.	June (NorCal)	CBD Flowers	15.9
6th (6)	Scandinavian Mooselodge	LightSky Farms	August (Michigan)	CBD Flowers	15.84
7th (7)	Radicle X	Radicle Genetics	June (Michigan)	CBD Flowers	15.77
8th (8)	Cannatonic #4	Herbal Solutions	June (Michigan)	CBD Flowers	15.06
9th (9)	Fruit Pharm Punch	Rogues Island Genetics with Something Better Concentrate Co.	April (LA)	CBD Flowers	15.0
10th (10)	Cannatonic#4	Herbal Solutions	August (Michigan)	CBD Flowers	14.94

National Chart: CBD

Compiled from all seven Cannabis Cups in 2016 and data provided by the labs previously listed.

Notes: For years now, there's been a Cannatonic strain in Michigan that regularly tests between 18% and 22% CBD. It appears this cut has now made it to Cali.

- Perhaps the most interesting name of the lot, the Scandinavian Mooselodge is actually an
 unknown clone. Given the prominence and proliferation of the Cannatonic strain, it's always
 a safe bet that this original keystone CBD variety is behind= the unknown strain.
 CBD OG?
 Yes, sir. If you haven't seen them yet, check out the excellent work from the folks at Dinafem,
 who have managed to infuse many of our favorite strains with higher levels of CBD via
 smart breeding practices.
- In 2016, High Times introduced a new category to our scoring: CBD-to-THC ratio. Of the above-listed high-CBD strains, the CBD OG came closest to a 1:1 ratio at 15.9% CBD and 7.58% THC—a 2:1 ratio. Radicle Genetics had an entry (not listed above) in the August Michigan Cup called Cellar CBD that had a 1:1 ratio at 7.65% CBD and 7.28% THC, as did 3rd Gen Family (in the April SoCal Cup, not listed above) named Nubia, which came in at 7.48% CBD and 7.95% THC. \checkmark

















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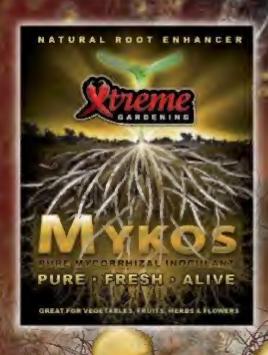
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Hard Work

People who grow medical cannabis know that it's hard work. Even the non-growers among us can get a sense of the hardships and complexities through friends or associates who do (or by reading magazines like this one). Nobody said that farming was easy, although so many of the people who have taken up the challenge call it "rewarding"—and not always in ways that you might expect.

Take, for example, this federally authorized crop of glorious medical buds being grown in Canada. A dialed-in grow op comprising multiple sealed rooms with optimal temperature, humidity and carbon-dioxide levels—and filled with towering buds of exceptional quality under high-pressure sodium (HPS) lights—is something of a dream for just about every marijuana aficionado with aspirations to grow their own.

Anyone who makes that dream come true can appreciate the level of dedication and persistence involved in achieving this kind of success. Plenty of ambitious newbies have tried it, only to run into serious problems and give up the attempt. So if you're a successful grower and think that you work too hard, think again—if you still have two legs to do it with, you're both lucky and privileged.

Overcoming Obstacles

This cannabis journalist was absolutely humbled at what he saw in this particular garden: foot-long colas, spotless foliage and for-real "two per light" yields. And to know that this is almost entirely the work of one man who does it all from a wheelchair really puts that achievement into perspective.

Let's call our grower "Bobby"—he's pretty humble and doesn't like attention, by the way. Bobby has been through hell and back, and he attributes his current outlook on life to the simple fact that he's able to grow cannabis under Canada's medical marijuana program.

Bobby lost the use of his legs when he was just 17 years old. An aspiring athlete from a hard-working middle-class family in Canada, he awoke one day in a hospital connected to life support, not remembering how he got there—or why his legs weren't working anymore. It was a horrifying situation for anyone to imagine himself in, to say the least—except there was no waking up from this nightmare.

Eventually, Bobby learned that he had driven his SUV off the road and







flipped it seven times after an all-day drinking party he'd attended. Not only was his spinal cord shattered beyond repair; so was his dream of playing in the National Hockey League. He had broken many major bones and suffered extensive internal injuries; the excruciation he would face in the coming months stemmed not only from the irrevocable loss of his NHL dream, but also from the repeated infections, medical procedures, major surgeries and life adjustments that were to follow. Bobby says that one of the things that kept him alive in those dark days was the love and support of his family; without them, he says, he would have seen no reason to go on.

Preparing for Success

After his protracted recovery, one of the greatest challenges that Bobby faced was getting his life back into his own hands. His family had always had a very strong work ethic—which means taking pride in being able to do things for yourself, earning your keep through the sweat of your own brow, so to speak. Relying on others to do things for him just wasn't an option. To move forward again, Bobby faced one of his first new major challenges: to wean himself off the hefty cocktail of pharmaceutical drugs that he'd been prescribed since the accident.

The combination of Valium, morphine, blood thinners and other drugs that he'd been put on by his doctors made it difficult to read a stop sign, let alone take charge of his own affairs and begin to lead an independent life again.

Healing Cannabis

Bobby used to enjoy smoking hash and hash oil as a youth; however, he now equated that with the "partying" that had cost him the use of his legs. But then came the day when he accepted a toke outside the hospital from a fellow patient whom he was keeping company while having a cigarette. After that toke, Bobby felt the best he had since the accident.

After toking on a few more occasions, Bobby decided that marijuana was helping him. (Keep in mind that this was long before we had the kind of information on marijuana's extensive medical effects that we do today.) Because he'd had so many interactions with medical professionals throughout his various

Top to bottom: Pruned plants under the lights A Kush cola fills out. Air-cooled lighting reduces heat buildup.



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treatments and surgeries, he decided to ask a psychiatrist that he was friendly with about his recent experiences. Loosely quoted, the psychiatrist replied that cannabis "is the safest thing you're taking right now."

So it wasn't just his imagination: Cannabis really was helping! But that's only the beginning of this story...

Getting Growing

Bobby started getting quality indoor hydroponic buds from someone involved with the growing medical cannabis movement in Canada, and he noticed the difference from the marijuana he'd smoked in earlier years—mainly in terms of potency and effects.

He also noticed that the availability and quality could be hit-and-miss, coupled with the fact that when he did get the good stuff, it was very expensive. He ultimately decided that it made more sense to grow his own.

Bobby's first indoor medical crop was modest, but it proved to be a success. It was a simple deep-water-culture (DWC) hydroponic system, the kind that's still recognized today as a great way to start growing indoors without lugging lots of dirt around, while also being able to source materials locally and inexpensively. To this day, Bobby credits the helpful folks on the early cannabis-growing Internet forums who risked helping a total stranger with their advice and knowledge.

The buds that Bobby harvested smoked clean. Best of all, he found himself with a nice little stash and no longer felt dependent on others to come through with the medicine he needed. Remember, this all happened while cannabis prohibition was still the rule in North America. But Bobby decided that the benefits outweighed the risks.

Grow West

Feeling a new sense of accomplishment, and having gained a level of independence since the accident that forever changed his life, Bobby ventured west in search of a more relaxed climate. He also felt, at the time, that he'd been depending on his family long enough. They had dedicated themselves to helping him, and he wanted to show that he could now do it on his own and lighten the load he felt he'd placed on them.

After finding a suitable location and securing a federal license to cultivate personal-use amounts via Health

Canada's medical marijuana program, Bobby started to grow again—and found the experience positive and life-changing in more ways than he expected.

He started off with six lights and a soilless mix, standard fare in that day and age. He now had the potential for higher yields to keep him supplied with a variety of legal medical cannabis. Naturally, this posed new challenges along the way.

Any growers out there can relate, recalling the challenges and difficulties of their own first setup: all of that trial-and-error, all those mistakes and hard work. Now imagine trying to do all that confined to a wheelchair. This guy did it—and he continues to do it very well.

Facility Specs

Today, touring Bobby's grow op, I have to say that the success he reaps is impressive by any standard. Bobby practices controlled-environment agriculture (CEA): Each of the sealed rooms he maintains for propagation, vegetative growth and flowering have an environment that is strictly monitored and independently controlled. Like most successful growers, Bobby developed his own personal recipe for success



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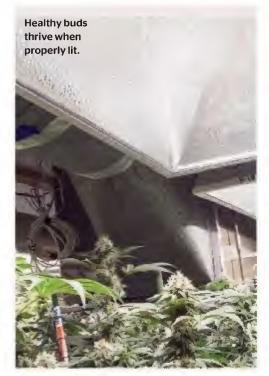
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after much trial and error—and he now designs cookie-cutter growrooms with ease that have the potential to deliver great results for anybody, despite their physical limitations.

A split air conditioner keeps the growroom temperature in check and removes humidity from the environment. The air is distributed through rigid steel ductwork running down the length of each of the sealed rooms, with openings that direct the air into the crop canopy. The AC units are sized to provide 5,000 BTUs of cooling power per every 1,000watt HPS grow light; this also helps to reduce the heat from the gas-fired CO₂ generators used to bulk up the buds throughout the cropping cycle. Carbondioxide levels can be optimized for each phase of growth because of the tight level of control that a CEA setup affords.

Light is directed from the lamps downward by XXL air-cooled reflectors. They do a good job of keeping the distribution even while allowing the plants to receive high levels of light. The fact that the heat is removed before it can enter the growing environment offers significant power savings relative to the cooling needs via air conditioning.

Bobby notes that it took a few tries



Canada's medical marijuana program generally doesn't allow high plant counts, so licensed growers cultivate larger plants instead. air-cooled models didn't seal as well as the ones he uses now; the leaks kept sucking carbon dioxide out of the garden, which in turn kept the CO_2 generators firing more often, amping up his gas and cooling bills. Looking at the reflectors he has now, it's clear that they were designed to be tight, with gaskets and fewer seams. Bobby also uses remote high-intensity discharge (HID) digital ballasts, which allows him to keep the ballasts out of the room and further reduces the heat in his growing environment.

Big Plants

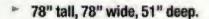
Canada's medical marijuana program generally doesn't allow high plant counts, so licensed growers cultivate larger plants instead. With this particular strain, Bobby has four big plants under every 1,000-watt light. The plants are cultivated in a peat-based soilless mix that has perlite added for better drainage. The final potting size is 10 gallons per plant.

Watching Bobby plow through this indoor field of trees is impressive. You can tell that he's had lots of practice, since he makes moving each of the heavy 10-gallon pots look continued on page 130

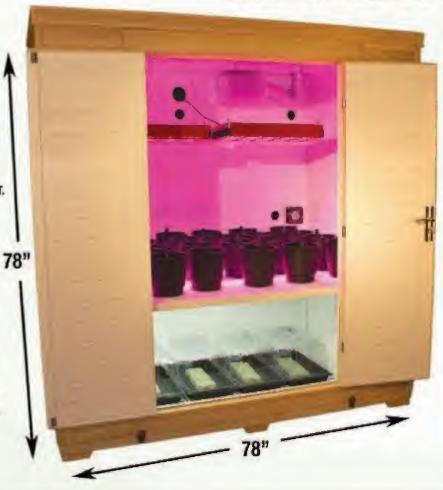


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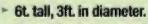
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Tainted: The Problem With

Should you worry about inhaling pesticide residues on the cannabis you're smoking? Find out how to source a safe supply of eco-friendly weed.

Story by Elise McDonough, photos by Justin Cannabis

Id-time heads will remember the Great Paraquat Pot Scare of the late 1970s, when Mexico, as part of a US-government-backed cannabis-eradication campaign, sprayed the potent herbicide onto fields of weed destined for export to the United States. While a 1995 study found that "no lung or other injury in cannabis users has ever been attributed to paraquat contamination," other research linked exposure to an increased risk of developing

Parkinson's disease.

At the time, fear about the effects of inhaling paraquat-contaminated pot motivated back-to-the-land hippies to breed their own unique hybridized strains, and in time homegrown California cannabis largely replaced smuggled bales from south of the border in the popular consciousness. Even today, most cannabis consumers wistfully imagine that their buds hail from some wholly unspoiled remote hillside

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Pot and Pesticides

in Humboldt County. Unfortunately, that bucolic picture is far from the reality.

Anyone who smokes cannabis, black-market or otherwise, is unwittingly participating in a huge uncontrolled experiment involving millions of human subjects. Most pot deals in prohibition states are a "take it or leave it" proposition involving a scarce commodity; people buy whatever's being offered, and possible pesticide contamination isn't on their radar. Even in states with

a robust medical marijuana market, lack of official oversight creates financial incentives that sometimes trump concern for public health and safety. This leads some growers to harvest their plants by any means necessary, including through the use of some truly scary rodenticides, fungicides and pesticides—none of which have been scientifically studied to determine their effects on human health when combusted and inhaled.

And so, after legalizing cannabis and implementing regulatory oversight, states like Colorado, Washington and Oregon have discovered a disturbing problem: An alarming percentage of cannabis is tainted by high levels of pesticide residue, prompting recalls and public-safety alerts. Chemicals like myclobutanil, imidacloprid, abamectin, etoxazole and spiromesifen, which are found in popular pest-control products, have been detected as residue on cannabis flowers and concentrated further in extracts and edibles.

Colorado's TruCannabis recalled flowers in October 2015 due to pesticide contamination; tainted trim from that incident was traced to batches of Edipure products and required the removal of some 20,000 packages from dispensary shelves. In the same month, in the first product-liability lawsuit of its kind, medical patients Brandan Flores and Brandie Larrabee sued LivWell, a Colorado producer operating some of the largest grow operations in the world, over its alleged use of Eagle 20.

"I want these companies to take a step back and look at what they are putting into their products," said Flores, 24, speaking to the *Los Angeles Times*. "These warehouses are getting big and really sloppy. They're adding chemicals to make things more efficient and more potent. But there are so many chemicals now that you might as well get prescription medication."

On November 3, 2016, Oregon officials issued a second public-health alert for specific batches of cannabis. About 370 customers had purchased the strains Dutch Treat, Pleeze and Dryzl from three different dispensaries in North Bend, Salem and Eugene that contained high levels of either spinosad or piperonyl butoxide. The alert prompted the heads of the Oregon Health Authority, Liquor Control Commission and Department of Agriculture to write a letter warning growers that they may be violating state regulations by using pesticides not permitted under the state's Pesticide Control Act, and that the Department of Agriculture would investigate those whose products failed pesticide screenings.

California's situation may be even worse than a few isolated incidents, with Steep Hill Labs reporting that 85 percent of the samples submitted for inspection contained measurable levels of pesticide residue and half exceeded levels prohibited by Oregon standards. According to Dr. Donald Land, a professor of chemistry, forensic science and biotechnology at the University of California, Davis, and an analytical chemist with decades of experience who has been working with Steep Hill, the problem is bigger than many can even imagine.

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"There's really no data," he says when asked if these pesticides are safe to inhale. "Nobody knows for sure, but the difference between eating something and inhaling something directly into the lungs is huge."

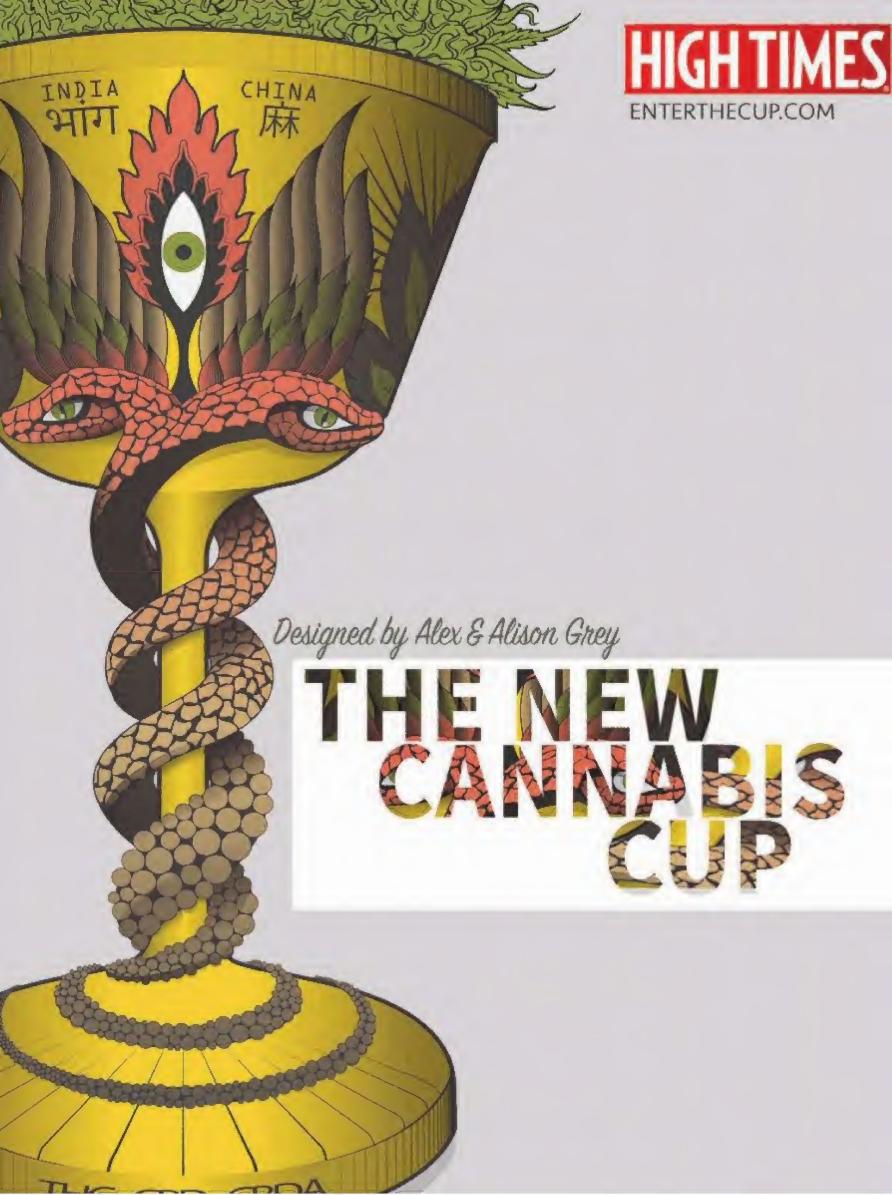
Animal testing as part of rigorous, expensive studies is usually how pesticide products are certified by the Environmental Protection Agency as being reasonably safe for human consumption. Because of the federally illegal status of cannabis, no such certifications can be obtained for pesticides used on the herb, especially because the health effects of combusting and inhaling pesticides rather than ingesting them are different and unknown.

Cannabis buds can get contaminated in a few different ways, including the direct application of pesticides on flowering plants; drift from neighboring fields of food crops; or (particularly insidiously) through systemic contamination. "Some pesticides stay on the outside of the plant and don't go internal, so as rain washes it off, it degrades and goes away after a period of time," Dr. Land explains. "Mycobutanil can get into the internal fluids of the plant, and we know from studies on other plants that it can stay in plant tissues for years."

Dr. Land suspects that this systemic contamination could be why cannabis samples fail pesticide screenings even when the cannabis is grown organically by producers determined to do the right thing. "A number of cultivators tell us that they've never used pesticides on their plants whatsoever, and yet we have unmistakable traces of these pesticides on those same plants," Dr. Land continues. "We suspect that the clones or even the mother plants may be contributing [to this]."

Even if a mother plant is treated with pesticides, the perception is that the clones will be just fine. But that's not necessarily true: If the pesticide used causes systemic contamination, it could enter the whole plant and persist for years, meaning that clones taken from the same plant would have presumably small but significant concentrations of pesticide as well. Clone producers preventatively treat their clones with pesticides numerous times between cutting and sale, so it's important to grow from seed if you're seeking to eliminate any potential contamination.

And your dabs, waxes and shatters aren't immune from contamination either—in fact, extraction processes may "concentrate certain pesticides even more so than cannabinoids," Dr. Land says, noting that most extraction processes get rid of microorganisms but not chemical contaminants. As a result, Steep Hill invested in expensive technology to test for pesticides at very low levels in order to predict if a flower sample will result in a highly contaminated concentrate.



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Planting marigolds around cannabis helps attract beneficial insects that prey on problematic bugs.

Don't Panic (if It's Organic)

According to Dr. Land, the first line of defense is rigorously testing all cannabis products for pesticides and preventing the contaminated ones from reaching the market. He also believes that more research is needed to establish safe "action levels" for various pesticides and to determine where the contamination has originated, along with greater consumer education and awareness. "There needs to be a realization on the part of consumers that this is an issue, and that will drive the market," Dr. Land says. "People need knowledge of exactly what they're buying."

Third-party certification agencies are a good start toward identifying safe suppliers and responsible growers, but consumers should investigate all such claims thoroughly. Also, since the word "organic" is a federally regulated term, it can't be applied officially to cannabis crops. Dr. Land says the word "organic" doesn't tell him anything when it comes to cannabis; he needs to know the standards used to verify that claim, including whether there's been testing for pesticides.

Beyond the potential health risks to tokers, pesticide use has serious environmental consequences. "There are no pesticides registered specifically for use directly on marijuana and the use of pesticides on marijuana plants has not been reviewed for safety or human health effects," reads a dispatch from the California State Water Board. Intending to reduce the environmental harms caused

by clandestine grow ops in the remote Humboldt hills, the CSWB distributed a pamphlet titled "Know Before You Grow," which educates growers in sensitive watersheds about improper pesticide use. Applying too many chemicals and using products irresponsibly causes toxic runoff into local rivers and streams, poisoning fish and wildlife. And the rodenticides left at outdoor marijuana grows threaten the endangered Pacific fisher, a rare predator belonging to the weasel family.

Conversely, growing cannabis indoors results in an enormous carbon footprint for each pound produced. The term "sun-grown" has emerged as a way to rebrand outdoor cannabis as a much more eco-friendly choice, but that term is also vague and has no meaning set by regulations.

Andrew Black, the founder of Certified Kind in Oregon, seeks to go "beyond organic" when it comes to inspecting indoor-production facilities. "We get indoor producers to look at the amount of electricity they use and reduce it," Black says, noting that the US Department of Agriculture has never had to deal with crops grown under high-intensity discharge lights in warehouses the size of a football field.

Third-party certification services, including Certified Kind, Clean Green and the Organic Cannabis Association, seek to identify cultivators who act as caring stewards of the earth as well as safe producers of pesticide-free cannabis. John Paul Maxfield,

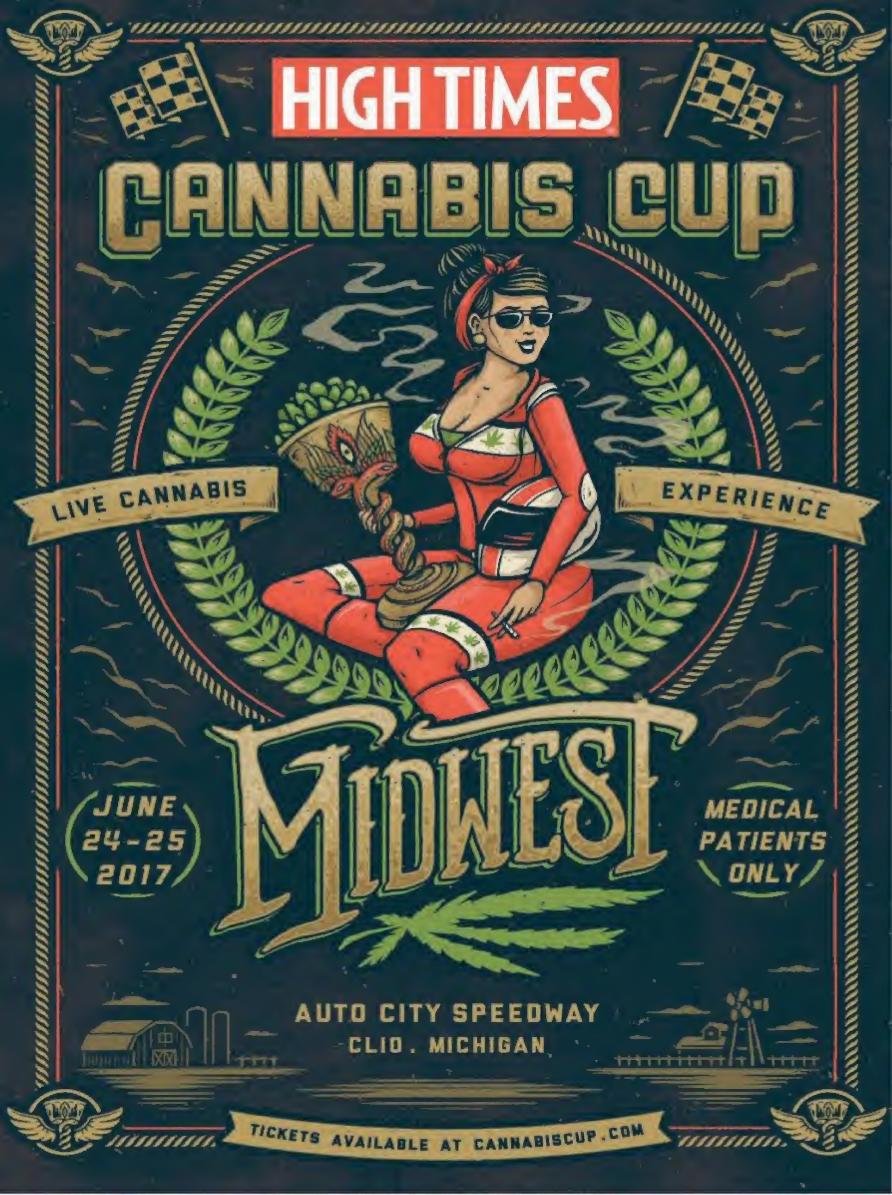
co-founder of Colorado's Organic Cannabis Association, says that creating a market for organically grown cannabis will happen as the industry continues to mature. "As prices become more competitive," Maxfield muses, "differentiators become an important thing."

With the proper third-party certification verifying their claims, growers can distinguish their products as being of the highest quality, while assuaging consumer concerns about pesticide contamination and environmental damage. Maxfield hopes that the fledgling cannabis industry will follow the evolution of the organic-food movement, first with independent certification agencies working state by state, then with federal legalization and the USDA finally establishing national standards for organically grown cannabis.

Andrew Black spent over 11 years working as a USDA organic certifier before he started Certified Kind in 2014, inspecting and approving 21 cultivators according to rigorous standards that include not only pesticide testing but social-justice considerations as well. "We don't want to see cannabis workers getting exploited," Black explains. Here he's taking a far more progressive stance than the USDA, which routinely ignores substandard working conditions for the immigrants employed by meatpacking plants and huge agricultural concerns. "If we ask farmers to treat the land with care and consideration, then they should treat employees with care and consideration also," Black says-including the right to collective bargaining and a living wage. In this way, he intends his company's certification process to "create a mechanism to encourage growers to treat workers with respect."

Only connoisseurs, smokers and activists who care deeply about cannabis can influence industry practices and spur them to develop in a eco-friendly direction that redefines conscious capitalism. The legacy of the underground cannabis industry involves a rejection of the environmentally destructive and unhealthy status quo and the adoption of enlightened values, including care for the earth and compassion for the people and animals that live on it. "People want to know that their cannabis is grown using organicfarming methods, and have a certifier that holds farmers to that basic standard," Black says. "Organic agriculture means less toxic chemicals in our air, soil and water."

So the next time you take a trip to the dispensary, ask for sun-grown or certified ecofriendly cannabis, and insist that retailers test for pesticide contamination. Cannabis is an incredibly safe, nontoxic substance, and we need to ensure that it remains pure and positive to ingest in every possible way.



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10 Tips for Growing Eco-Friendly Cannabis

Complied by the Organic Cannabis Association

1. NURTURE YOUR SOIL

To grow high-quality cannabis, you'll need high-quality soil, so the first step is to get a test from a local soil lab, which will give you a better understanding of the physical and chemical characteristics of your soil. If you're growing hydroponically, seek out the best medium for your system, such as buffered coir mixed with perlite, which is affordable and sustainable and offers excellent retention of water, air and nutrients.

2. CUSTOMIZE YOUR FEEDING REGIMEN

Depending on their strain, size and stage of life, cannabis plants demand different nutrients. Fertilize precisely and dynamically, since nutrient needs increase and change throughout the plant's life cycle. Organic nutrients become available to plants primarily through microbial breakdown, a living process influenced by fertilizer type, moisture, temperature and time. Understanding this evolving dynamic and the specific needs of your chosen strains will take practice, but the results are well worth the effort.

3. WATER THOUGHTFULLY

Much like the fertilizer regimen, your watering needs change as your plants grow and the seasons progress. Protect your plants with an excellent irrigation schedule and/or system. This is essential to maintaining enough water in your medium so that plants don't have to work too hard to meet their transpiration needs, while also providing enough air to the roots and enough soil microbes to keep plants thriving. Water frequently and shallowly when plants are just transplanted. Increase the irrigation amounts but decrease frequency once your plants are established, allowing for healthy root development and growth.

4. CONTROL YOUR CLIMATE

Essential to keeping plants happy and healthy, precise climate control avoids stressing plants with excessive heat, cold, humidity or dryness. Climate control also contributes to pest management by preventing powdery mildew. Keeping relative humidity under 90 percent and having constant airflow throughout the plant canopy will help you avoid the dreaded PM without running your systems too hot and dry, which can encourage spider mite problems. (Growroom temperatures above 80°F with relative humidity below 40 percent create the perfect environment for spider mites.)

5. KEEP IT CLEAN

Organic plant management requires making sanitation one of your highest priorities. Clean up and dispose of any pruned or discarded plant material as soon as possible to prevent infestations of pathogens or insects. Always wear clean clothes when you're working in your garden, especially after handling infested material or visiting other gardens. Thoroughly deep-clean your grow area after each harvest to break the cycle of insects or pathogens. Designing systems with sanitation in mind will ensure that everything can be easily cleaned and kept sanitary.







6. KNOW YOUR STRAINS

Intimate knowledge of the strains you're growing will help you recognize problems before they turn into major outbreaks. In organic systems, it's much easier to catch a problem early and address it than trying to reverse an out-of-control infestation or disease. Plants give hints that something is wrong, such as curled or discolored leaves. Pay attention and learn what thriving plants look like, so you'll know when something isn't right.

7. PRACTICE INTEGRATED PEST MANAGEMENT

Integrated pest management (IPM) works hand in hand with nature and requires understanding plants, pests and pathogens. A robust scouting program involves looking for problems in the garden every day. Look under leaves and in every nook and cranny to catch pests early. If you find one, it's important to accurately identify the pest before finding the least toxic product available to resolve the problem. Use all pest-control products correctly and responsibly. Just because a product is organic doesn't mean it's safe, so read, understand and follow the label. IPM also involves evaluating systems, understanding why you had a problem, and changing the way you grow so that problems don't happen again.

8. USE FRESH, CLEAN AIR

Filtering your intake air greatly helps to prevent pests and pathogens from entering your grow-room. With many different filter types and sizes on the market, be sure you're getting the right one for your system. Regularly clean, maintain and replace your filters so that this equipment doesn't harbor insects or pathogens as well.

9. CONSULT ORGANIC-MATERIALS LISTS

Both the Organic Materials Review Institute (OMRI) and the Washington Department of Agriculture (WSDA) review products to determine if they're suitable for organic growing. Check online to see if the product you want to use has been reviewed and approved for use in organic operations, but be careful: Some products have been approved for uses that have nothing to do with plant cultivation. (For example, some products are approved as an animal feed but not as a plant fertilizer, so read carefully.) Also, just because a product hasn't been approved by OMRI or WSDA. it doesn't mean it's prohibited in organic production; it can also mean that the manufacturer didn't pay to have its product reviewed. Overall, consulting the OMRI and WSDA lists can help you find organic products, but neither one is an exhaustive list of all the options available.

10. WRITE NOTES!

Recordkeeping is necessary if you wish to systematically improve your process. You won't remember without writing it down, because there are so many variables to keep track of when growing cannabis. Keep a written record of everything you do in order to look back and diagnose how problems started. Detailed records also help when trying out new products or techniques and evaluating the results. Your trusty notebook or spreadsheets will be your best tool for becoming a better grower. **

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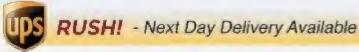
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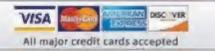
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PETE DAVIDSON

By Danny Danko
Photos by Joe Schaefer

THE HIGH TIMES INTERVIEW



OMEDIAN AND SATURDAY NIGHT LIVE CAST MEMBER PETE DAVIDSON IS KNOWN FOR BEING OUTSPOKEN AND FOR PROVOKING AUDIENCES WITH UNCOMFORTABLE TRUTHS. WHETHER HE'S ROASTING FELLOW COMEDIANS, POLITICAL PUNDITS OR JUSTIN BIEBER, DAVIDSON'S BARBS MAKE PEOPLE SQUIRM AND LAUGH IN EQUAL PARTS. BUT MANY AREN'T AWARE THAT HE ALSO SUFFERS FROM CROHN'S DISEASE AND DEPRESSION. PETE SAT DOWN WITH HIGH TIMES TO DISCUSS HOW MARIJUANA TREATS HIS PHYSICAL AND MENTAL PAIN AND TO SEND A BLUNT MESSAGE TO THOSE WHO WOULD SEEK TO CONTINUE POT PROHIBITION.

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Tell me about your first experience with pot.

I was 16, and I used to hang out with kids that were maybe two or three years older than I was, because I really wasn't making any friends my age and they lived just around the corner. But I didn't really get high, and I thought I did it wrong. Then, a week later, they had a party and I went, and they taught me how to inhale and keep it in. And I started coughing, and then they all started clapping for me... it was a very Staten Island moment. I remember getting so high that I texted this dude and just said, "Thank you so much for this," and I was so high I didn't leave-I just closed the door where they were all in the room and texted him like I had already left. And I wrote, you know, "Thank you so much for this." I heard him get the text and go, "For what? What a weirdo." So then I left. That was the first time I ever got high.

Does cannabis play any role in your creative process?

I just talk about it in my stand-up. I'm a pothead... I don't think that's my type of comedy-like, I don't think I would consider it stoner comedy-but it's definitely a huge part of my life. I got Crohn's disease when I was 17 or 18, and it's really the only thing that helps me eat or have somewhat of an appetite and not be in pain. I started doing this other thing called Remicade a year or two ago, which is an infusion, and that helps a lot. But I wouldn't have an appetite or be able to have a decent-feeling stomach if I didn't smoke. So it's really helpful. Weed helps me perform—I'd be in a lot of pain before shows, and I smoke a joint and then immediately I can do this.

So you use marijuana medicinally.

Yeah.



"I wouldn't be able to do *SNL* if I didn't smoke weed.
I wouldn't be able to do anything, really."

Do you qualify for the medical program in New York?

No, it's not really that easy here yet. In LA I could do it, and Denver you could just walk in. But I don't think a lot of people understand how helpful it is.

Can you elaborate on how medical cannabis helps you?

I mean, obviously, I love to smoke weed—I like to get high as well. I wouldn't not smoke weed if I didn't have Crohn's... it's just I've found that the medicines the doctors were prescribing

me—until recently, when I got on Remicade-didn't help. Weed would be the only thing that would help me eat; it would help me not be in pain all day. I would have shows and have to travel, and I'd be in a lot of pain when your stomach hurts, it sucks. I think stomachache and throwing up are the two fucking worst things. So my stomach would be in pain all day and I wouldn't be able to eat, and then I'd smoke and I'd be able to eat and do my shows. I wouldn't be able to do SNL if I didn't smoke

weed. I wouldn't be able to do *anything*, really.

Some people have a very old way of thinking: "Well, why don't you just make *crack* legal?" It's like, it's not really the same thing.

Even those people can't deny the munchies aspect of cannabis. That's what the jokes are always about, right?

Yeah, like, "Oh, you're going to go to White Castle now!"

The thing they're joking about is actually quite serious for people who are in pain or who have difficulty eating.

Yeah, I know. It's weird—everybody's offended today, but I kind of *do* get a little offended when people are like, "Oh, you're just a pothead watching cartoons." It's like, "Maybe that's what *you* do when you smoke weed, but me, I go to work and get shit done." It's just a backwards way of thinking.

Didn't Lorne Michaels have a funny quote about you?

I got a *New York Times* article, and Lorne, one of his quotes was: "For someone who mainly talks about how much pot he smokes, he's extremely focused." Which is my favorite quote probably ever.

What's your favorite thing to do while stoned?

Just, you know, be able to live my life—that's my favorite thing to do. I can start my day now and I don't have to worry about getting a stomachache or being in pain all day. I can go out, go for a walk, write some jokes... movies are better, everything's better. So for me, it's a lifestyle change. It's part of my daily routine.

What's the funniest thing that's happened to you while smoking pot?

I live in New York, so the funniest thing is always when you're smoking and driving



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and you're with friends, and you go from having so much fun to immediately scared when there's a cop. That's why Waze is so dope, because it gives you just enough time—it'll be like, "Yo, in 0.3 miles there's a cop." So that's like, "Give me the joint. Let me put it out. Put the window down. Air it out. Light a cigarette. Mask the smell. Cop right there. You're good." Until Waze, it used to be very stressful to smoke weed in cars.

Have you ever performed not high?

Me performing not high has gone awful. Not *awful*... but it's awful for me, because I don't feel well. When I smoke, you can't really tell the difference between me being high or myself, because I've been high for a very long time. I'm sure you know what that feels like, where you're like, "Oh, I'm me now." I'm more comfortable. I can perform not high, but it wouldn't be that much fun for me.

Do you prefer sativas or indicas?

I prefer strictly only *sativas*, because I'm a depressive-type person, and when you smoke weed and you have depression, you have to be very careful. That's another reason why weed should fucking be legal here, is because I don't know what weed I'm getting, you know? I know the specific strain that makes me feel better. I'm very lucky that I found a guy who lives around me that can help me out. There's CBD, and there's stuff that doesn't have that high an amount of THC—I smoke that a lot, because it just helps me feel refreshed and it's like medicine.

Some people have depression and would like to smoke weed, and need it as well. When it's legal and you know what you're getting and you feel better, it's just like—it makes so much sense to me that it *should* be legal.

We've met veterans with post-traumatic stress disorder, and so many of them have said it's the thing that's keeping them alive. But there's a segment of the population out there that thinks we just want to get high.

Right.

What would you say to those people, if you could speak directly to someone who's anti-marijuana?

If you're anti-marijuana and you think that I just want to get high, it doesn't really make sense to me, because I work really fucking hard—and to be labeled as some lazy dude that just likes to get high and watch cartoons and have a bunch of

Frosted Flakes because I'm fucking high, it's not like that. I work really fucking hard and take care of my shit, and I need weed in order to do that because I'm sick. I have Crohn's, so it sucks. And smoking weed allows me to do that. So if I can do all that while smoking weed, I'm sure there's no problem with it being legal.

"I work really fucking hard and take care of my shit, and I need weed in order to do that because I'm sick."

Do you have a favorite stoner-comedy movie?

I loved *Half Baked* before I smoked weed. I was, like, 10 when I saw that movie, and I thought it was hilarious. Then I started smoking weed and I was like, "This is the greatest movie ever!" But my favorite thing is to get high and watch movies that you don't think you'd like, and then you like them when you're high. I like watching shitty movies high and correcting everything and adding my own scenes.

At the Rob Lowe roast, you famously called Ann Coulter the C-word.

Yes, I did. See, like, when I got in trouble for—I wouldn't even really say "trouble," but when people were saying shit, like they can't believe I called Ann Coulter a cunt, I was like, "I thought that was a known thing." Like I-you know what I mean? [Laughter] I thought it was a fact, like, "Roses are red, violets are blue, Ann Coulter is a cunt." So when people said they were *shocked*, I was like, "I don't really feel like that's the right word." I feel like they were just, "Oh, someone said it. Someone said it to her face." You know, you're allowed to believe whatever you want, but to me, that lady is just a shit-stirring piece of shit, and I'm glad I got to call her a cunt twice. I'll be really happy about that forever.

You're in the cast of SNL.

Yeah. I don't know about after this interview, but for now I'm on the cast of *SNL*... currently, yes.

Times have changed, because 10, 15 years ago, this could have hindered your career.







I'm super-fortunate to grow up in a day and age where it's almost at the point where smoking weed is, like, normal culture. People are like, "Yeah, I don't smoke weed, but I don't give a fuck." You know what I mean? My grandpa's like that: "I don't do it, but go nuts." Most people that you love, your heroes out there, all you non-smoking people that don't want it to be legal—your hero probably smokes weed. So do you hate your hero?

And I'm not saying—I want to clarify this—I was not calling *myself* a hero... I think I'm a piece of shit. I was saying, "If you're at home and you like any actor that's on television, the odds are that they probably smoke weed." I don't need that quote popping up: "Pete called himself a hero for smoking weed." That is not the point I'm trying to get across here, okay? All right. Great.

You grew up on Staten Island, the birthplace of the Sour Diesel.

Yes, it is. One good thing came from Staten Island, and it is Sour Diesel.

There's a huge opioid epidemic, with pills and heroin flooding the streets of Staten Island, and I know that's affected you directly. Can you talk a little bit about marijuana versus harder drugs?

Yeah. I have a couple friends that were... I've lost a friend or two. A group of friends that I started smoking weed with went to pills and stuff like that. Unfortunately, I had to cut myself away from that environment, because I'm an easily influenced person, vou know? Like if vou have them, I will do them. So I've luckily surrounded myself with what I feel are justweed-and-nothing-else type of people. But there's a huge pill epidemic in Staten Island, and when you go there, you just... feel it, kind of. It's like a sad place. And I say

it like—there's good people everywhere. It's not just there, though.

Do you think legal weed would help?

Legal weed would help out a lot, because most of these kids are just—you know, instead of getting one joint for \$5 or whatever, they get a pill that lasts them the whole day, and they get really fucked up and they get addicted. If weed was legal, I feel like a lot of people wouldn't be doing as much drugs.

You wrapped [the *Big Lebowski* spinoff] *Going Places* last year. Is there anything you can tell us about the movie vaguely enough to not get in trouble?

Vaguely, I—see, you can tell I've never been in movies before, because I don't even know how to answer this question... like a normal, real actor would know exactly what to say. I can say I had a great time. I'm in it, Bobby Cannavale is in it, Susan Sarandon is in it, and there's a lot more surprises, and it's based off a French film, and it's really, really funny and it's going to be really exciting.

Awesome.

It was one of the first times I was actually filming something, and one of the first times I ever felt like I'm in comedic history... just a cool character, and the fact that they're doing a movie spinoff on it—it's like a nerd's wet fucking dream.

I am that nerd.

Yeah, me too. I'm just happy to have two lines and be in it for a second. It's nice.

So you've got Saturday Night Live, you had your Comedy Central special, you've got the movie, and things are pretty good.

Yeah, things are okay. I'll never, never be *happy*, but I am happy in this moment, for sure. ¥



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Guerrilla growing, when to water, adding humidity, burnt leaf tips and more...

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SUBJECT: Guerrilla Gardening

FROM: Big Pooch

Is it possible to grow in a wooded area? We have many near where I live, but I'm not sure how to get started.

Dear Big Pooch,

Yes, it is possible to set up a guerrilla grow in a wooded area, but there are a few things you need to consider and a few factors that must be in place. First, you need to find the right spot. This means scouting out several locations and choosing the ones that are right for you.

The first thing to consider is safety and stealth. You don't want to plant on someone's private land. Look for areas in the woods that don't look like places where people go hiking or hunting. Planting along trails will do you no good. One good tip I heard is to pin a few dollar bills to the trees near the area you want to plant. If they're still there when you go back, it might work; if they're not, move on.

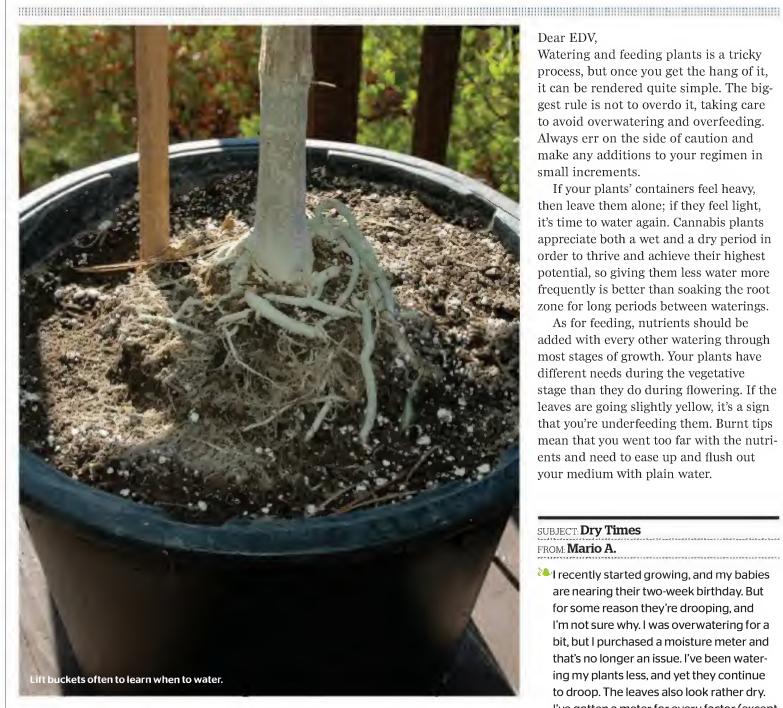
The next consideration is light penetration. You want at least six or more hours of full sun in order to get decent growth from your plants. Find an area, preferably on a southern-facing slope, where trees have fallen and the new growth isn't too tall. A clearing surrounded by thorns makes a perfect spot where hikers, hunters and deer are unlikely to tread.

Bring a shovel and dig some holes in your chosen spot. Supplementing and aerating the local soil is a must, so bring some light soilless mix to add to your holes and mix it up with some of the local soil you've dug out. This is also a great time to add polymer crystals, which will soak up water and release it over time to your plants. Then do your best to camouflage the holes, replacing displaced leaves and twigs to cover the upturned dirt.

When springtime comes and the threat of frost is nil, take your rooted clones or seedlings that you've started indoors out to your spot and gently transplant them into the holes. Water them in and take care not to leave a trail into and out of your clandestine grow spot. There are also great surveillance products, such as motion-detector cameras, that you can mount on a nearby tree in order to keep a watchful eye on your pot plot. Good luck!

110 Dear Danko High Times May 2017

> Danko Tip: Grow lights should never be more than 2 feet away from plant tops, so be sure to lower or raise them as necessary.



SUBJECT: Evaporation FROM: Jimmy D.

Should I leave my water jugs open to let the chlorine and other bad chemicals escape?

Dear Jimmy.

Yes, it's always a good idea to let tap water sit for 24 hours or so before using it to hydrate your plants. This allows chlorine and other chemicals to dissipate from the water and will result in healthier plants. Of course, this step isn't necessary if you're using a reverse-osmosis (RO) machine to cleanse the water of impurities.

SUBJECT: When to Water

FROM: El Dedo Verde

How do I know when to feed my plants? They're in the flowering stage, and they always take about five days between waterings. Once the mix is about an inch dry on top, I usually soak them. Can I water a little bit every other day instead (i.e., 1 quart for each 3-gallon pot)? They feel heavy and full when I lift them two to three days after watering, so I'm worried about overdoing it. Will my plants get enough nutrients this way? Will I get more or less yield with more frequent waterings? Any advice would help-I've been growing for three years now, but it's my first time with coco and perlite. Thanks!

Watering and feeding plants is a tricky process, but once you get the hang of it, it can be rendered quite simple. The biggest rule is not to overdo it, taking care to avoid overwatering and overfeeding. Always err on the side of caution and make any additions to your regimen in small increments.

If your plants' containers feel heavy, then leave them alone; if they feel light, it's time to water again. Cannabis plants appreciate both a wet and a dry period in order to thrive and achieve their highest potential, so giving them less water more frequently is better than soaking the root zone for long periods between waterings.

As for feeding, nutrients should be added with every other watering through most stages of growth. Your plants have different needs during the vegetative stage than they do during flowering. If the leaves are going slightly yellow, it's a sign that you're underfeeding them. Burnt tips mean that you went too far with the nutrients and need to ease up and flush out your medium with plain water.

SUBJECT: Dry Times

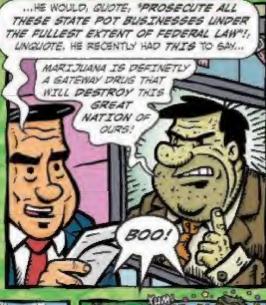
FROM: Mario A.

I recently started growing, and my babies are nearing their two-week birthday. But for some reason they're drooping, and I'm not sure why. I was overwatering for a bit, but I purchased a moisture meter and that's no longer an issue. I've been watering my plants less, and yet they continue to droop. The leaves also look rather dry. I've gotten a meter for every factor (except a light meter), and everything is within the acceptable ranges listed in Jorge's grow bible.

The only thing wrong that I can see is my humidity: The highest it's ever gotten is 39%, and usually it hovers near the low 20s. I'm not sure if this could be affecting my plants, since apparently low humidity is unheard of in the cultivating community. I tried some homebrew methods of increasing the humidity, and nothing. I even went so far as to buy a tiny humidifier; it's sort of helping, but the levels are still not close to the acceptable ranges. What could be causing my plants to droop and look dry, and what can I do about it? Thanks for your time and your efforts.





















LATER.

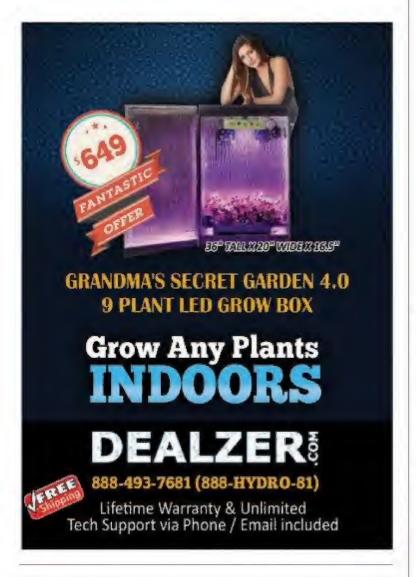


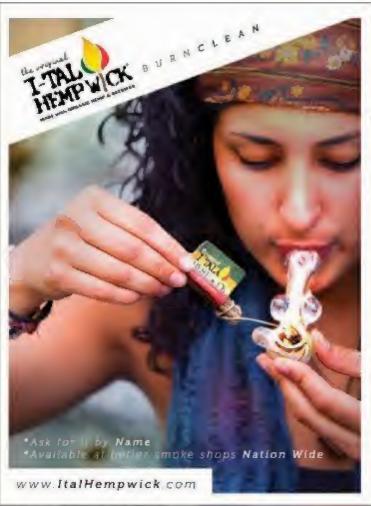






MISSION ACCOMPLISHED!





Danko Tip: Plant containers on wheels or casters are easier to move around the growroom than those sitting flat on the floor.

Dear Mario,

Seems you've diagnosed your problem perfectly: Low humidity can be the cause of drooping leaves and can make them seem dried out as well. You have to find a way to raise the humidity in your growroom.

For starters, the tiny humidifier must be replaced with a larger one. You can also put a pot of water on a nearby heater and mist the plants often if it's not a very large space. If you have a large growroom (bigger than 8' x 8'), you may want to consider investing in an evaporative cooler (a.k.a. swamp cooler) that cools and moistens the air. Once you get your humidity to a preferable 50% or so, you'll see signs of healthier growth.



SUBJECT: Smelly Mothers

FROM: Matt M.

Do you still need a carbon-filter exhaust and a fresh-air intake when housing a mother plant in a tent? I didn't think so, because a carbon filter is an odor eliminator. I can see the need for a fresh-air intake, but I don't know—I'm new to this. Also, do I need to exhaust the air from inside the tent if I'm using an LED setup?

Dear Matt.

I would certainly recommend both a carbon filter and a freshair intake for any grow operation. The carbon filter will eliminate any telltale odors from your exhaust air. You'd be surprised how much mother plants and plants in their vegetative stage can smell as they grow. Even without flowers, the plant matter will exude a strong scent that should be filtered before it's released into the air.

A fresh-air intake is also essential for all stages of plant growth. When air becomes spent and stagnant, growth rates slow





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Danko Tip: Always check the pH level after adding all of your nutrients to your liquid plant-food solution.

to a crawl. Fresh, cool air with CO_2 (carbon dioxide) keeps photosynthesis chugging along, so there must be both intake and exhaust fans as well as an oscillating fan within the space to keep the air moving. And yes, even with an LED light, you still need to exhaust the air from inside your tent.

SUBJECT: No Flowers

FROM: Peacock

My plants are in the flowering stage, but they don't look like they'll turn into buds. They've been on a 12/12 schedule for a month now. I'm growing the Money Maker strain. How much longer?

Dear Peacock,

Money Maker (bred by the Strain Hunter Seed Bank) is an *indica*-dominant strain with an eight-week flowering time. If your plants have been in the 12-hours-on/12-hours-off light cycle for a month now and you don't see buds forming, then something is definitely wrong. Most likely, you either have light leaks that are keeping the plants in the vegetative stage, or you're not providing enough light for them to form tight flower clusters.

Any interruption of the necessary 12 hours of darkness will result in your plants remaining in the vegetative stage and not forming flowers. Go inside your grow space and turn the light off. If you see any light leaking in at all, eliminate it. Also, be sure that the light you're using provides enough lumens for healthy growth, and make sure that it's close enough to the plants' tops as well.

SUBJECT: Burnt Tips

FROM: Smokey

My plants always seem to have burnt tips on their leaves—sometimes more and sometimes less, but with every harvest I always find crispy ends on the leaves when I'm trimming. What's causing the burning, and how can I avoid it in the future?

Dear Smokey,

Burnt tips are always a sign of overfertilization. Too much plant food causes the tips of the leaves to get crispy, as you've described. Further overfeeding will only make the situation worse, until you have a toxic level of salts in your plants and they begin to die. The important thing to remember when feeding is that it's much easier to add more food than it is to take food away.

The first thing you should do is flush your plants with plenty of plain water to reduce any existing nutrient buildup. You might notice a white residue on your containers; this is a sign of too much salt building up in your growing medium. After the flush, slowly add nutrient solution at one-quarter to one-half the recommended strength, and you should see new growth emerge. Err on the side of caution and you won't see burnt tips any longer.

The other added benefit of not overfeeding your plants is that your buds will taste better and burn properly to a clean, white ash. Too much nutrient residue left in your flowers will make them taste harsh, and it can also be harmful to medical users with a compromised immune system. Your lungs will thank you when they take in a toke of clean-burning, fertilizer-free cannabis. \checkmark

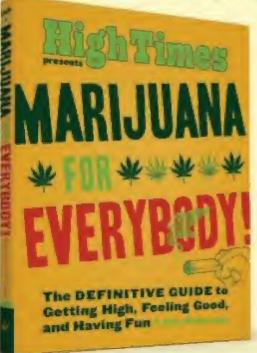
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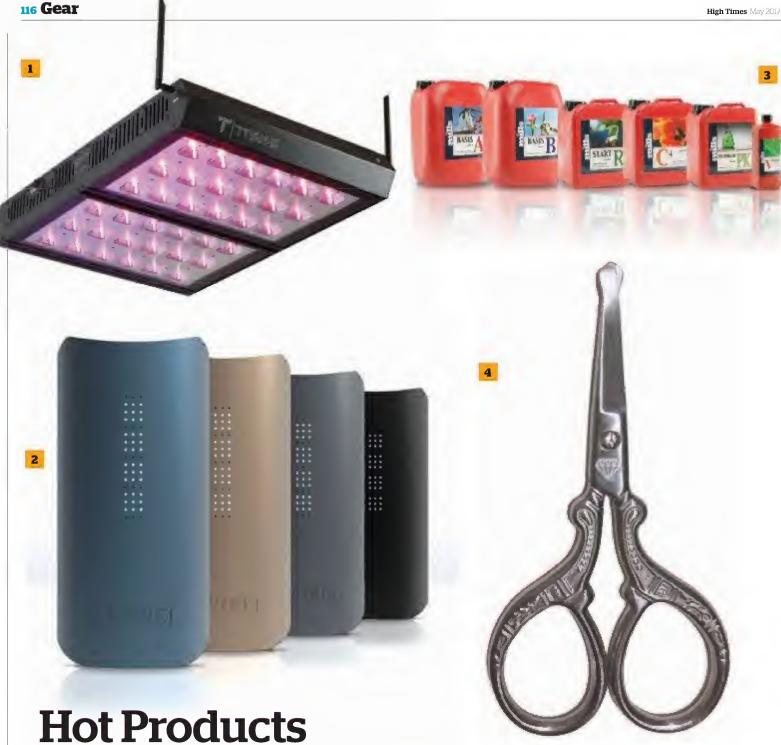
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What's new for cannabis cultivators and connoisseurs

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cirrusled.comLED lights have made tremendous advances in reducing the amount of electricity used and heat produced in the growroom. The new Titan 5 from the experts at Cirrus LED Systems boasts a long list of industry firsts and exclusive features: The proprietary MCOB array is engineered to maximize power and efficiency along with full control, while the Cirrus Leaf App allows you to wirelessly customize your schedule and spectrum from any iOS or Android device.

2 Raise Your IQ

\$274.99

davincivaporizer.com Finding a good vaporizer for flowers is more difficult than finding one for concentrates. That's why the new DaVinci IQ has impressed us with its form, function and quality of materials. The unit is compact and fits well in your hand, and the ceramic vapor path and precision temperature control ensure the proper purity and flavor of your terps. Plus the app, for iPhones and Android devices, lets you control the temperature and more via Bluetooth.

3 Pay the Bills

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mills nutrients.comFrom Holland arrives the next generation of nutrients geared toward optimized growth rates, yield, flavor and aroma. Mills Nutrients' biomineral-nute regimen consists of an easy-to-use two-part base along with special additives designed for speedy performance and maximum essential-oil production. Use only six bottles from seed to harvest in soil, coco coir, hydroponic or aeroponic applications, whether in sterile systems or with beneficial bacteria and microbes. Commercial sizes are also available.

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Dissatisfied with a corporate career trajectory, Chris Yang abandoned an almost-completed master's degree in hospital management and decided to become a cannabis cook. Spending days marinating in marijuana and *YouTube* cooking videos, Yang taught himself the basic techniques by watching Gordon Ramsay and built a significant Instagram following. Catering private parties for influential bloggers led to a new project called Pop Cultivate, a monthly series of infused dinners held at Container Yard in downtown Los Angeles, featuring the best in seasonal cuisine.

Yang came to compete at the first-ever "Taste of Cannabis" competition held in San Bernardino last October as part of the High Times Cannabis Cup. Sponsored by Magical Butter, the contest showcased the skills of the burgeoning number of chefs who specialize in cannabis cuisine.

The challenge involved going up against another chef to create a dish inspired by a randomly selected regional cuisine, and Yang wowed the judges with his creations. Winning the competition with an inventive take on chicken and waffles, Yang credits cannabis with inspiring him to follow his true passion in life.

Learning to cook for yourself is one of the most rewarding skills to have in life, connecting you with the rhythms of the seasons, the land you live on, and the people in your life who gather to share food together. This recipe from Chris Yang is a simple side dish based on a few fresh ingredients. Maple-glazed carrots could accompany a pot roast or pork chops, and the combination of lemon juice, fresh herbs, maple syrup and cannabutter is downright delicious.

Follow Chris Yang on Instagram at @ cheftopher and @popcultivate.

Marijuana Maple-Glazed Carrots

2 bunches fresh baby carrots

4 tbsp. butter

1/4 cup maple syrup

Fresh lemon juice

tbsp. cannabutter

alt and freshly ground black pepper

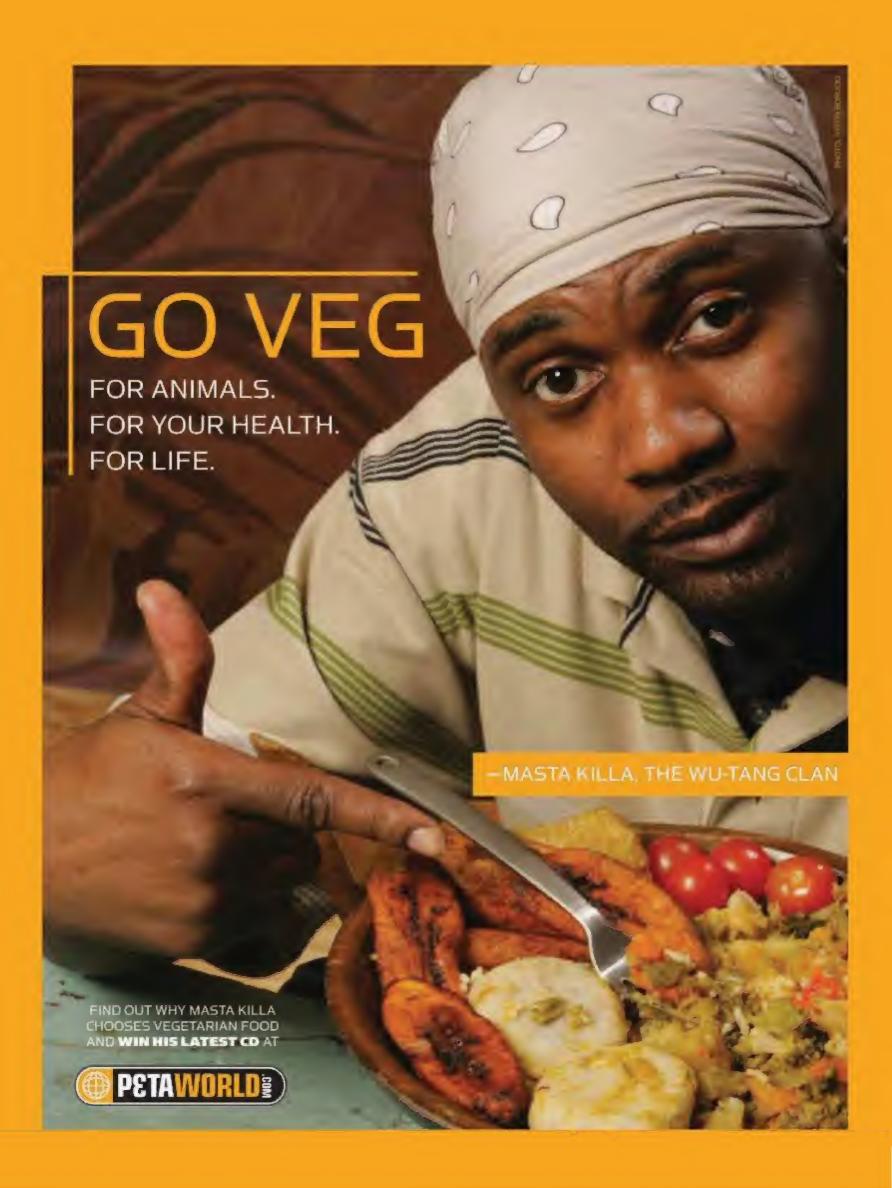
tbsp. fresh parsley leaves

5 to 6 sprigs of thyme

Wash the carrots whole and give them a good scrubbing (use a new sponge or kitchen towel). Melt the butter in a large, heavy sauté pan over medium-low heat. Add the carrots and thyme, cover, and braise, stirring occasionally, until the carrots are fork-tender, 20 to 30 minutes.

Increase the heat to medium, stir in the syrup, then add the cannabutter and a squeeze of lemon juice. Cook for two minutes, then season to taste with salt and pepper. Add parsley and mix well.

Serve with a lemon wedge.



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authentic flavors to those who love

From a new, chef-driven edibles company, this chocolate-mint sandwich cookie packs 100 mg of THC into a decadent, flavorful experience. Flourish Edibles brings amazing cookies, brownies and s'mores to locations in Arizona as well as the Bay Area. flourishcannabis.com

Cruz N' Combo

Big Pete's Treats specializes in cannabisinfused cookies, with a wide range of traditional flavors to choose from, including these Cruz N' Combo cookies that will satisfy your cravings for peanut butter, chocolate and oatmeal! bigpetestreats.com

Lemon Sugar

Moist, sweet and bright with fresh lemon flavor, these expertly baked treats from Kaneh Company will leave you wanting more! Available with either 100 or 250 mg of THC, these cookies are just one creation from a company with a fabulous menu full of delightful baked goods. kanehco.com



Snuggle Bites

Delivering a specific functional effect with cannabis-infused edibles is a growing trend these days, as producers combine our favorite herb with a host of other medicinal plants to produce a range of desired effects. The custom-designed highs from Swerve Confections include Buzz Bars (makes you lively), Snooze Bars (makes you sleepy) and Snuggle Bites (makes you horny).

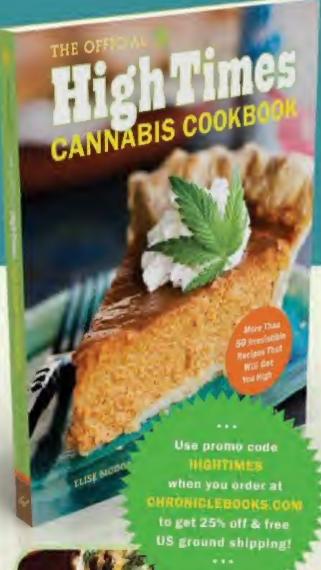
Reflecting the ancient wisdom that cannabis enhances healthy sexual behavior, Snuggle Bites uses herbs considered to be aphrodisiacs in traditional Indian medicine, such as shankha pushpi, kapikkachu, ashwaghanda, vldarikanda and maca. Both men and women can stimulate the libido and enjoy greater passion, as well as remedy hormonal imbalances, fatigue and PMS. Each bite contains 50 mg of THC, with four to a package for a total of 200 mg. swerveconfections.com



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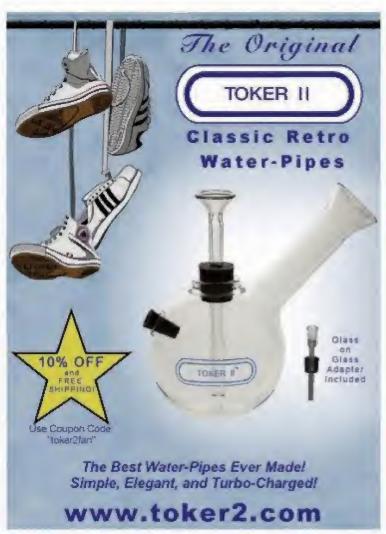
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What's the word on marijuana and PMS2

Cherry McGrew

Hi Cherry,

Women report that weed is great for some symptoms but not others. Irritability, depressive moods, anxiety and sleep problems respond well, as you'd guess. Most strains of the plant are less helpful for breast tenderness, fatigue and difficulty concentrating. Behavioral interventions such as meditation, extra sleep, daily relaxation and planned positive activities can help a lot. Cognitive interventions that focus on the temporary nature of the symptoms (and how they don't reflect a personality trait) are also helpful.

Cannabidiol for acne? Really? Big Pimp "L"

Hello Big.

CBD has worked on human cells in the lab, essentially preventing them from making the fatty, waxy stuff that creates acne, while also decreasing the skin-cell inflammation that accompanies it. This happened even in the presence of acne-inducing testosterone, the dreaded source of many a "big pimp L." I wouldn't start crumbling Harlequin strains on my face, but relevant creams are in the making!

Are we going to see more official cannabis science now that more places have legal weed?

Curious Styles

Yo Curious, Unfortunately, not in the



short term. Many universities rely on federal funding for their research. Some investigators fear that, even if they live in a legal state, their work could put that funding at risk: What's to keep the Feds from withdrawing all of the funds from a school simply because one nutty psychologist wants to see if THC helps depression? Fortunately, the handful of researchers who do have federal licenses to study Schedule I drugs will still do a lot of good work.

Can a balm or lotion really allow THC to penetrate the skin?

E. P. Dermis

Hi E.P.,

If cannabinoids are combined with the appropriate oils, they will penetrate skin reasonably well. They won't create drastic changes in consciousness, but they can certainly provide medical benefits like relief from pain or psoriasis. *

Dr. Mitch Earleywine, PhD, is the author of Understanding Marijuana and The Parents' Guide to Marijuana.

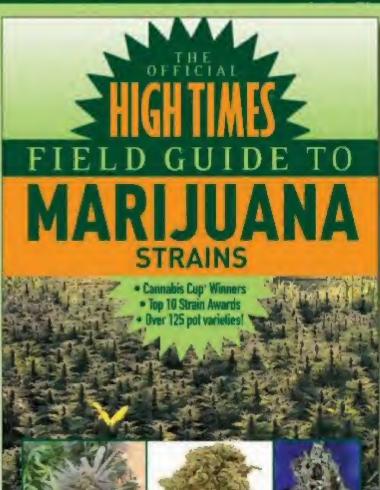


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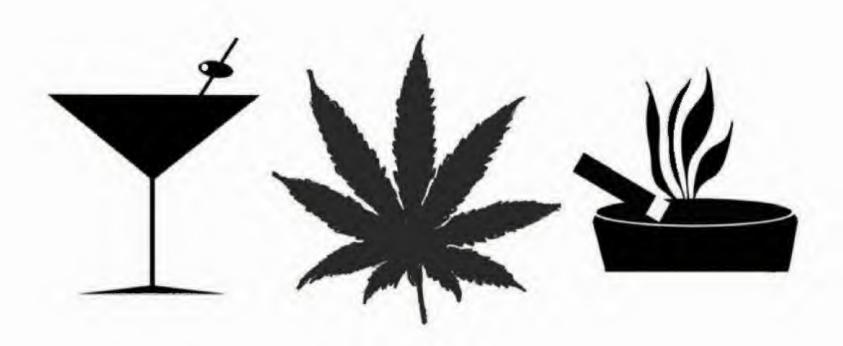




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City by City, State by State

In 2017, the real fight for marijuana-law reform will be coming to a neighborhood near you.

S THE WELL-WORN saying has it, all politics are local. And when it comes to defending our current progress and continuing to roll back marijuana prohibition nationwide, that's never been truer.

Our victories since 2012 cannot be overstated. We managed, as a movement, to bring honest-to-God legalization to over 20 percent of the American population in just four short years. Despite these gains, 42 states are still living under the iron fist of pot prohibition. While the millions of people living in legal states can now shake off the stigma of criminalization and simply purchase their cannabis from regulated, statelicensed businesses, millions more still face serious penalties for possessing even a single joint.

When we look at the national picture, it's clear that we're winning the war. But legalization in California doesn't mean a thing when your friends in Texas are still getting locked up. Legalization in Massachusetts doesn't help patients in Oklahoma get the medicine they need without being labeled criminals.

Though progress is slow in certain parts of the country, more states than ever considered marijuana-law reform during last year's legislative sessions.

The momentum we've created with our recent wins can't be underestimated. But in order to capitalize on this moment, we must organize like never before, focusing our efforts on city councils and state legislatures.

By nature cautious and averse to change, politicians prefer to avoid taking on the hard or risky issues. That's why we must make ourselves omnipresent. We need

to mobilize en masse to make the issue of ending pot prohibition unavoidable. We need to organize protests and rallies. We need to attend town-hall events and farmers' markets. We need to make hundreds of phone calls and send thousands of e-mails. And all of us must lobby our elected officials—not just in Washington, but in their home districts.

There's a lot at stake, and we likely won't get everything we want immediately. I know progress in the form of rescinding driver's-license revocations or implementing a fine-based version of

It's clear that we're winning the war. But legalization in California doesn't mean a thing when your friends in Texas are still getting locked up.

decriminalization seems less exciting than full legalization, but in some states it's all that's politically feasible this year. But the good news remains: Millions of Americans across the country no longer face arrest, and all the harm that comes with it, simply for possessing marijuana.

Change doesn't happen overnight, so I hope you'll get involved and take action. Join your local NORML chapter and organize locally. Kansas City NORML and Western New York NORML are two chapters that are

making great progress locally working to pass reforms through city and town councils. State organizations like Virginia NORML are orchestrating large-scale citizen-lobby days to push their lawmakers to approve decriminalization and medical marijuana measures. Wyoming NORML is working to get a medical marijuana initiative on the ballot in the near future.

All these groups are made up of citizen volunteers-people just like you. And they need your help to ensure that their efforts are successful. *

FREEDOM FIGHTER

By Kevin Mahmalji, NORML national outreach coordinator

Web Warrior

An Oregon activist uses his social-media prowess to battle for cannabis-law reform.

Born and raised in Oregon, Johnny Green is a marijuana activist who divides his time between volunteering for Portland NORML and spreading the word on marijuanalaw reform via his blog Weed News. Green passionately believes that fostering awareness and providing accurate information is vital to overcoming the reefer-madness propaganda that has prevailed for

so many decades. To that end, he has written more than 12,000 activismrelated articles on the Internet, reaching tens of millions of people.

"Cannabis prohibition has been used to harm many people, including people I care a lot about," he says. "Fighting to end prohibition isn't about fame or fortune; it's about preventing more lives from being ruined. That's why I fight, and why I'll continue to do so until prohibition is overturned everywhere

In addition to his efforts with Portland NORML and Weed News, Green has put in countless hours assisting

legalization campaigns across the country, engaging voters through social-media outlets and other channels. His understanding of strategic messaging allowed legalization efforts like Washington's I-502 and Oregon's Measure 91 to connect with thousands of volunteers and supporters in order

to pull off those historic victories.

For the 2017 legislative session, Green and his colleagues in Portland NORML will be working with a newly formed coalition of chapters from states that have legalized the adult use of marijuana, including California NORML, Washington NORML and Denver NORML. His proven expertise will assist the coalition in the promotion of its message. With state legislative sessions ramping up around the country, expect Johnny Green to be in the thick of the battle.



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Many years ago, I was fishing, and as I was reeling in the poor fish, I realized, "I am killing him—all for the passing pleasure it brings me."
And something inside me clicked.
I realized as I watched him fight for breath, that his life was as important to him as mine is to me.



I AM PAUL McCARTNEY, AND I AM A

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130 Growing Weed From a Wheelchair High Times May 201



continued from page 88 easy—even from his wheelchair.

Given the number and size of the plants that Bobby moves around daily in order to maneuver through all of his growrooms, it's safe to say that he takes an athletic approach to gardening. In keeping with his earlier ambitions, this guy has the build of a hockey player. It turns out that he does this for nearly eight hours almost every day. Bobby talks and dreams about growing benches of plants in a "sea of green" (SOG) setup at a more accessible height, which would make his life a lot easier. (SOG growing uses higher plant counts in the same-sized area. The plants are harvested more quickly and, because of their smaller size, require less work, since automation, rolling benches, etc., become much easier to employ.) But that's just not in the cards at present: Bobby takes his plant counts seriously, because abiding by them ensures that he can continue to grow the plant that means so much to him and his health.

Going Hydro

While most people would be content to rest on their laurels after finally dialing in their custom grow op, Bobby has decided it's time to level up while maintaining or even reducing his existing plant counts by switching over to hydroponics. (Remember his first crop that started it all? Hydro DWC!)

In taking the next step to automated hydroponics versus soilless mix, a.k.a. "dirt," he's looking to achieve a higher degree of sustainability while creating a better working level of automation. The hope is to maintain or improve the quality of the buds he harvests while giving Bobby more freedom to grow—this time away from the garden.

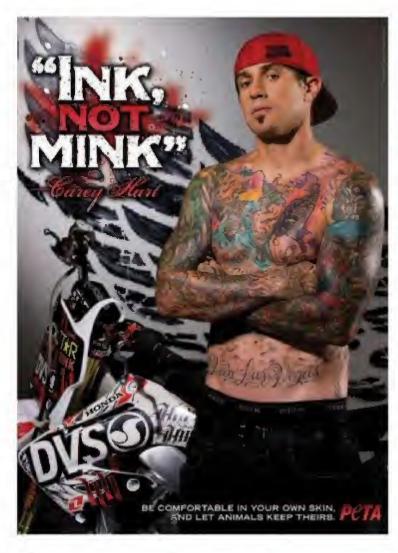
Learning to do all this on his own over the last several years has galvanized Bobby's sense of independence and his desire to live life to the fullest. He'd like some time to travel and see more of the world. At the same time, the garden he's created and the people who depend on it—he's a designated grower for himself and one other patient—isn't something he wants to shed, but rather to improve.

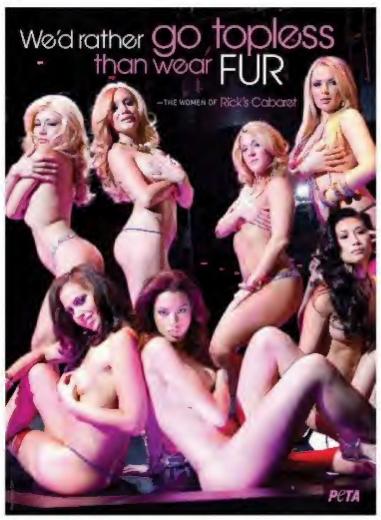
Keep On Reaching Goals

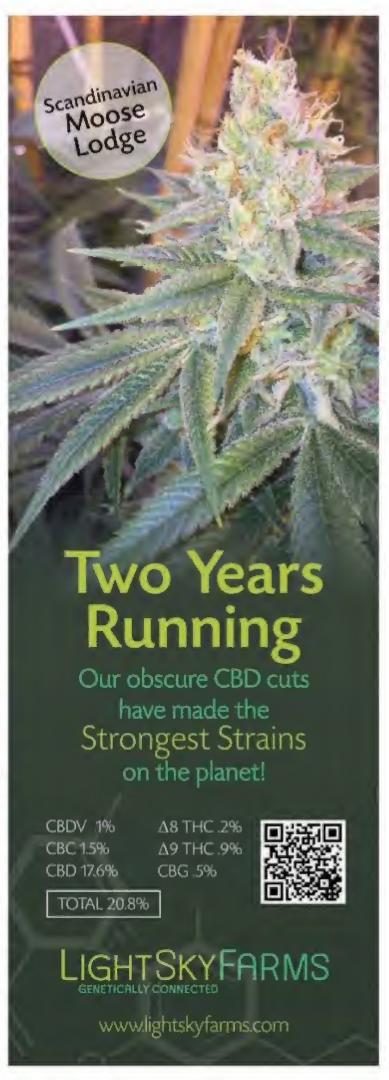
Besides having some well-earned fun and the freedom to enjoy life, Bobby wants to use some of the time he hopes to free up helping other people who now find themselves without the use of their legs. He remembers vividly his own early period of hopeless despair, as well as the many heart-wrenching challenges and changes he endured to move forward and begin living his life again—largely with the help of being able to cultivate crops, in this case federally authorized medical cannabis.

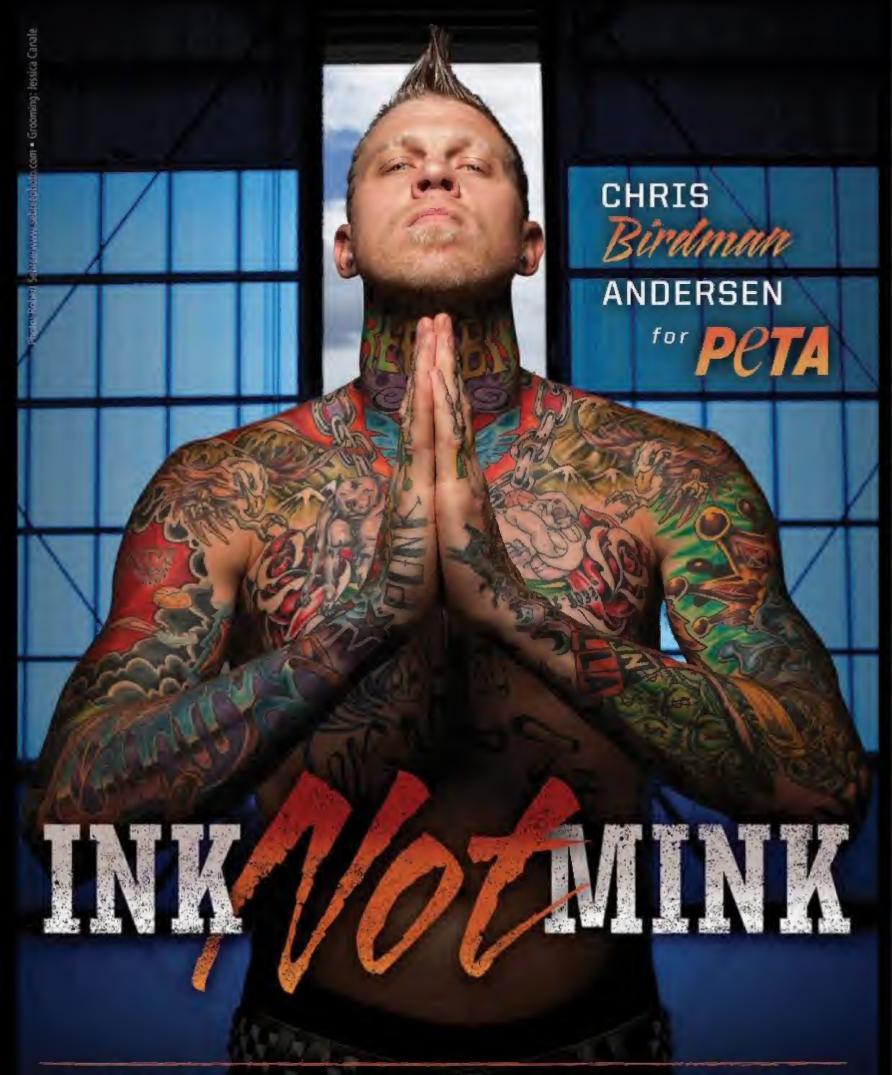
The working model he's built successfully over time is useful for any grower, but it has the potential to be especially valuable to others who have restricted mobility or reach. It's truly exciting to think what his new water-culture-based working model will look like—the next generation of DIY wheelchair-accessible medicinal gardening.

In closing this chapter of his story, Bobby recalls being a teenager smoking a joint and browsing through *High Times* in the early '90s, never imagining that one day his story might be featured in the very magazine he grew up reading in his youth. For him, it's a sign that his life has come full circle—a story almost too hard to believe, much like his whole life, he says with a smile. \checkmark

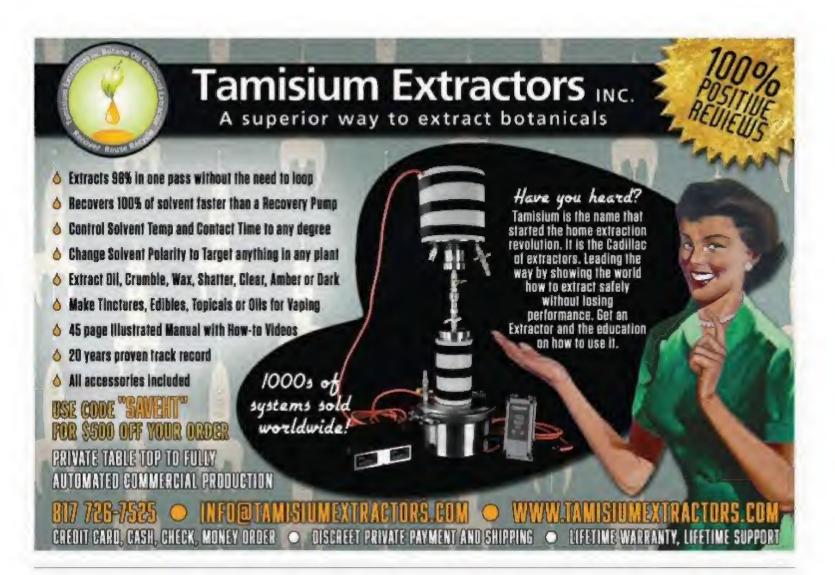








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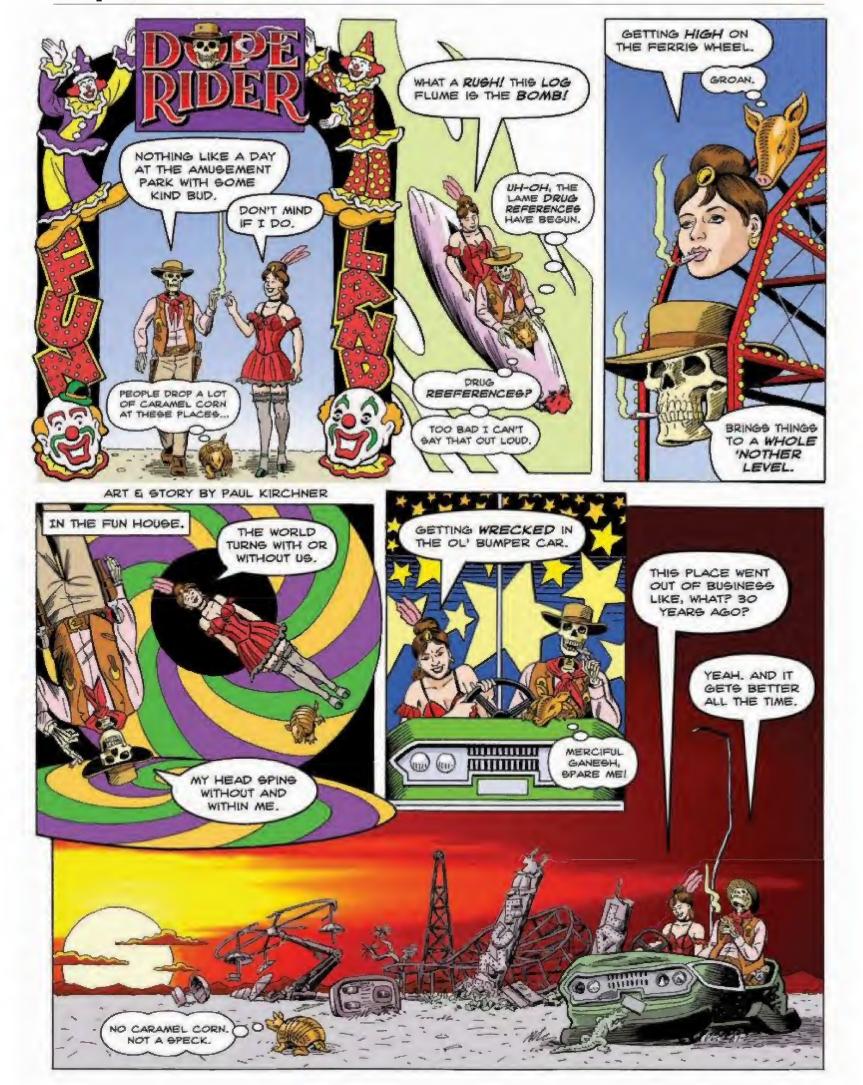
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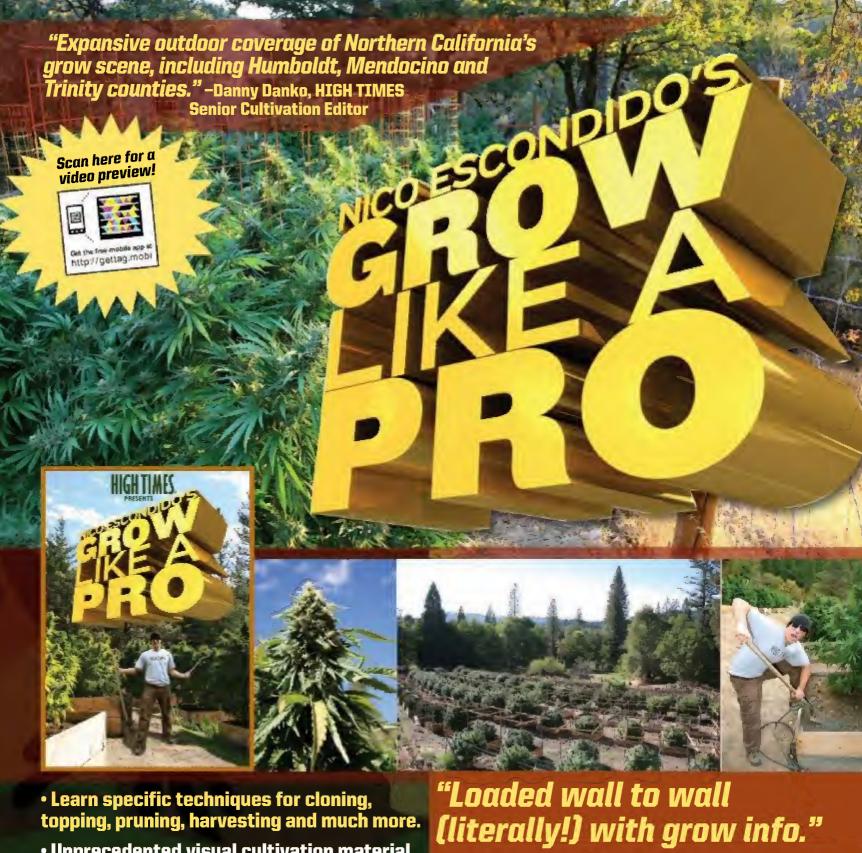




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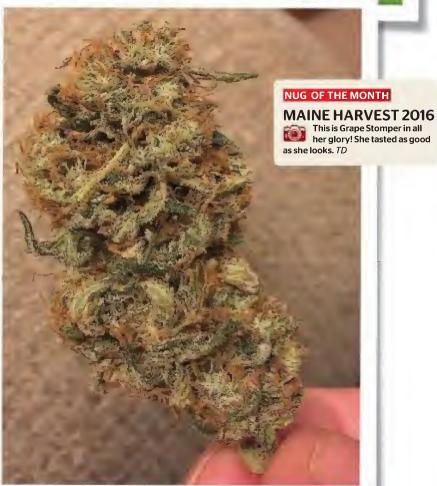
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Order online at headshop.hightimes.com 138 Pix of the Crop High Times May 2017

CLOSE UP OF THE MONTH







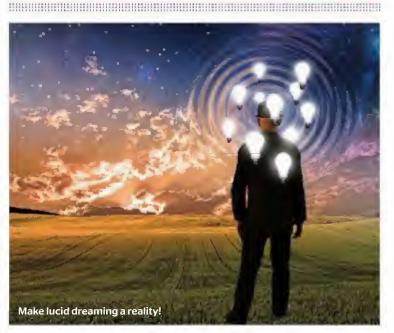


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HIGH TIMES



Live Your Dreams

Learn about lucid dreaming—including techniques that allow you to enjoy any fantasy, confront past traumas, and explore the frontiers of consciousness—with an excerpt from the groundbreaking new book *Dreaming Wide Awake* by David Jay Brown. With more than 20 years of experience in mastering the practice of lucid dreaming, Brown discusses how to "awaken" within your dreams, how cannabis and other herbs affect your sleeping life, and the intimate relationship between shamanic journeys, visionary plants and psychedelic drugs.

Alex Grev

The visionary artist extraordinaire reveals how ayahuasca has influenced his creative output and inner being. Plus: An exclusive first look at his design for the new High Times Cannabis Cup!

▶ Giant Plants of Southern Oregon

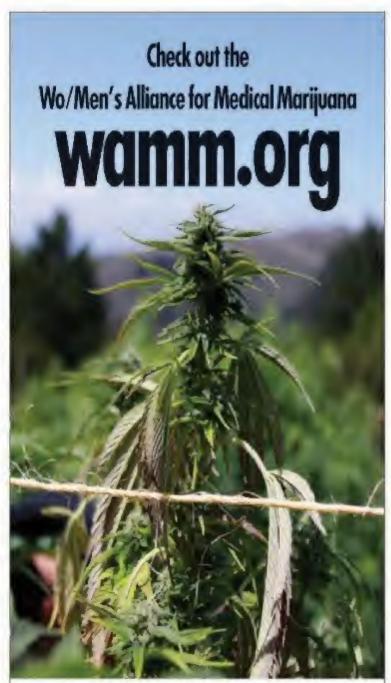
If you're an experienced grower who's allowed only six medical plants, what do you do? You grow them *really, really huge*. Lambsbread shares his secrets for an abundant harvest of organic buds from 14-foot trees, grown in this sun-drenched region known for its potent weed.

Spring Planting Guide 2017

'Tis the season to sow your crops if you want to grow and harvest massive outdoor ganja trees. Learn insider tips and tricks for successfully starting your pot plants this spring, including preparing your soil, germinating seeds, rooting clones, training, pruning and more!

Damian Marley

The Grammy Award-winning reggae artist tells us about turning a prison into a legal weed farm, being his father's "biggest fan," and where exactly to go in Jamaica to smoke a nice spliff and eat grilled fish on the beach.



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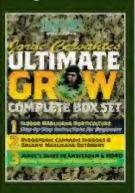




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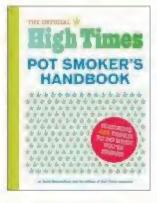
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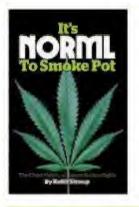
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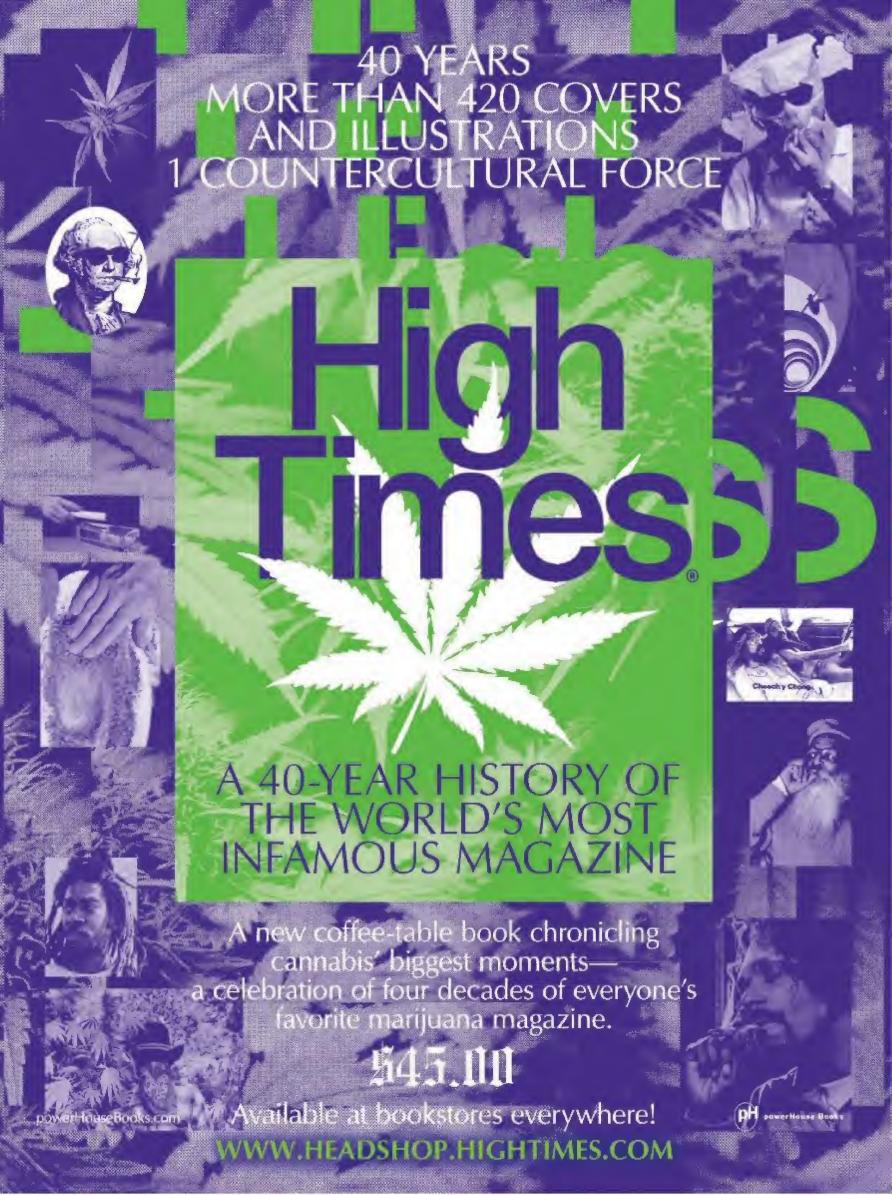
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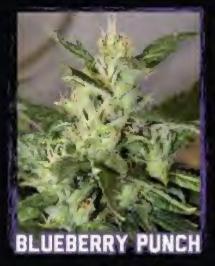
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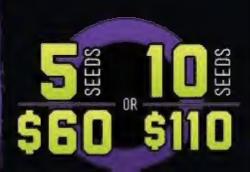
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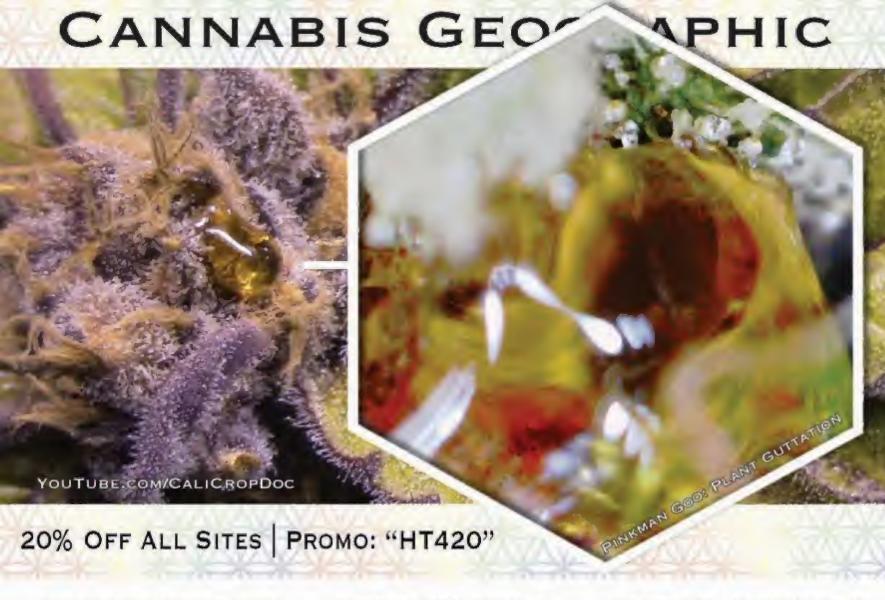


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